

Extension of the yeast metabolic model to include iron metabolism and its use to estimate global levels of iron-recruiting enzyme abundance from cofactor requirements

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1 Extension of the yeast metabolic model to include iron metabolism and its use to estimate
2 global levels of **iron-recruiting** enzyme abundance from cofactor requirements

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24 ABSTRACT

25 Metabolic networks adapt to changes in their environment by modulating the activity of
26 their enzymes and transporters; often by changing their abundance. Understanding such
27 quantitative changes can shed light onto how metabolic adaptation works, or how it can
28 fail and lead to a metabolically dysfunctional state. We propose a strategy to quantify
29 metabolic protein requirements for cofactor-utilising enzymes and transporters through
30 constraint-based modelling. The first eukaryotic genome-scale metabolic model to
31 comprehensively represent iron metabolism was constructed, extending the most recent
32 community model of the *Saccharomyces cerevisiae* metabolic network. Partial functional
33 impairment of the genes involved in the maturation of iron-sulphur (Fe-S) proteins was
34 investigated employing the model and the *in silico* analysis revealed extensive rewiring
35 of the fluxes in response to this functional impairment, despite its marginal phenotypic
36 effect. The optimal turnover rate of enzymes bearing iron cofactors can be determined *via*
37 this novel approach; yeast metabolism, at steady state, was determined to employ a
38 constant turnover of its iron-recruiting enzyme at a rate of $3.02 \times 10^{-11} \text{ mmol}$
39 $(g \text{ biomass})^{-1} h^{-1}$.

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41 KEYWORDS: Iron metabolism, enzyme cofactor turnover, yeast, metabolic networks,
42 iron-sulphur maturation

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1. INTRODUCTION

Metabolic networks are comprised of the interactions of metabolites, enzymes, and their regulators (Sauer, 2006). Just two of these components, the enzymes and the metabolites, are included in most metabolic network models. Enzyme abundance and metabolite concentrations have been shown to act inversely to maintain homeostatic control of metabolic reaction rates in *Saccharomyces cerevisiae* (Fendt et al., 2010). Thus an understanding of their relationship can help us to determine the nature of transitions between different metabolic states.

The measurement of intracellular metabolite pools and protein abundances are useful approaches to understand these homeostatic mechanisms, and have been applied to many different systems ranging from bacteria such as *Escherichia coli* (Bennett et al., 2009) to tumour cell lines (Madhukar, Warmoes, & Locasale, 2015; Matsumoto et al., 2016). While total protein content and absolute quantification of individual proteins have been reported for a number of biological systems (Bennett et al., 2009; Carroll et al., 2011; Madhukar et al., 2015; Matsumoto et al., 2016; Picotti, Bodenmiller, Mueller, Domon, & Aebersold, 2009), the properties of metabolic systems cannot be defined by studying enzyme proteins in isolation. Enzymes are often present in lower copy numbers compared to other components of the proteome, such as ribosomal proteins. For some enzymes, these copy numbers are at the limits of detection and quantification by current analytical techniques (Picotti et al., 2009). A recent study on the direct and absolute quantification of over 1800 yeast proteins revealed that < 25% of the proteins that could be quantified were components of the metabolic network (Lawless et al., 2016).

Metabolic models with high predictive ability are important tools for the investigation and engineering of metabolism (Aung, Henry, & Walker, 2013). Metabolic models can provide reasonable predictions when direct measurements of network components are infeasible, as is demonstrated by predictions on flux distributions using genome-scale models (Orth, Thiele, & Palsson, 2010). Analyses with stoichiometric models can be used to predict flux, but **only a limited number of studies exist on their use for estimating absolute enzyme abundances, for example in yeast (Nilsson & Nielsen, 2016; Sánchez et al., 2017); an alternative approach would be to** make use of the cofactors to determine the relative abundances of those enzymes that use those cofactors.

To exploit this relationship between metabolic enzymes and their cofactors, we propose a network-based strategy to determine optimal enzyme abundance by model predictions based on the metabolic requirements of their cognate cofactors. We have studied a family of cofactors that are not, themselves, metabolic intermediates and which do not have donor functional groups. We chose to study the iron cofactor family, including iron in its ionic form (Fe^{3+} , Fe^{2+}) and complex ion entities such as the haem family (sirohaem, haems A, B, C and O), and the iron-sulphur clusters (2Fe-2S , 4Fe-4S), because these iron-containing cofactors bind nearly 10% of the documented enzymes and transporters in the metabolic network. Baker's yeast, the first eukaryote to have its genome sequenced (Goffeau et al., 1996), has long been a favourite model organism (Botstein, Chervitz, & Cherry, 1997). Cellular activities including DNA replication, recombination and repair, RNA transcription and translation, intracellular trafficking, as well as the enzymatic activities of general metabolism, and mitochondrial biogenesis are conserved from yeast to human (Barrientos, 2003). The availability of comprehensive

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89 and powerful genome-scale models of the yeast metabolic network (Aung et al., 2013)
90 for almost two decades (Famili, Forster, Nielsen, & Palsson, 2003) made yeast an ideal
91 model for our study. Although there is a wealth of knowledge about iron utilization and
92 homeostasis in yeast (De Freitas et al., 2003; Lill & Mühlenhoff, 2008; Miethke &
93 Marahiel, 2007), this information has not been integrated into the curated genome-scale
94 metabolic model, thus limiting the model’s usefulness for *in silico* studies. This issue has
95 recently been highlighted by a comprehensive study on the comparative analysis of yeast
96 metabolic models (Heavner & Price, 2015).

97 In this work, we have extended the genome-scale metabolic model of *Saccharomyces*
98 *cerevisiae* to include iron metabolism, and made the first comprehensive mathematical
99 representation of any inorganic ion in a model of a network in a eukaryote; this model is
100 publicly available (BioModels (Chelliah et al., 2015) access no: MODEL1709260000).
101 The new model has been benchmarked against known environmental responses (namely
102 changes in the availability of iron and copper) and genetic modifications relating to iron
103 metabolism. The model has allowed the identification of the extensive re-wiring of
104 metabolic fluxes to cope with the hemizygoty of essential genes involved Fe-S cluster
105 maturation. The model permitted the establishment of the requirements for iron-family
106 cofactors, based on how the fluxes were distributed through the metabolic network. These
107 requirements were then employed as proxies for calculating the metabolic requirement of
108 those metabolic enzymes and transporters that employ iron species as cofactors.

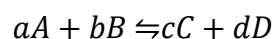
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110 2. MATERIALS AND METHODS
111 2.1 Modelling Methods

2.1.1 Primary metabolic model, simulation environment, and model annotation

The primary model for the incorporation of iron metabolism was selected as the most recent stoichiometric model of the *S. cerevisiae* metabolic network (v7.6) (Aung et al., 2013). The extended model (Yeast7.Fe) is provided as Supporting Information S1 and the details on modification and extension of the existing model are provided in Supporting Information S2 in supplemental material. The extended genome-scale model of *S. cerevisiae* is available in a COBRA compatible-SBML format (v.4). A specific growth rate of 0.1 h^{-1} was used unless otherwise specified. The iron and copper supplementations of the system was determined from a standard defined medium for *S. cerevisiae* (Baganz, Hayes, Marren, Gardner, & Oliver, 1997). Iron- and copper-limitations were imposed on the system by scaling the extracellular availability of the respective ions in the medium down to 10% of the original upper bound. Details regarding the extension annotations and the simulation environment and approaches are provided in Supporting Information S3, and the simulation code is provided in Supporting Information S4.

2.1.2 Cofactor representation

For any metabolic reaction catalysed by a cofactor requiring enzyme (N):



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where the stoichiometric coefficients of the substrates (A and B) and products (C and D) are denoted by their cognate lower case letters, a cofactor (X) of enzyme N enters the metabolic reaction as a substrate and leaves as a catalytically unreactive product:

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$$aA + bB + xX \rightleftharpoons cC + dD + xX$$

136 N

137 Details regarding the representation of cofactors are provided in Supporting Information
138 S3. The distribution of fluxes throughout the metabolic network would be correctly
139 influenced by the requirements for, and the availability of, iron in this representation.
140 Iron-containing cofactors could be required for some of the enzymes necessary for
141 catalysing a reaction, and a dedicated amount of cofactors should be reserved for this use,
142 without being actually involved in the reaction itself. The effect that this modification had
143 on the distribution of fluxes, including the growth rate, will be discussed in the Results
144 section.

145
146 2.1.3 Evaluation of the predictive power of the model

147 Prediction of gene essentiality was used as the evaluation criterion for the new
148 reconstruction. Empirical data on *S. cerevisiae* S288C strain essentiality was obtained
149 from Saccharomyces Genome Database (SGD) (Cherry et al., 2012a) (website accessed
150 on 22/03/2017). A full list of non-SGD resources for gene essentiality is provided in
151 Supporting Information S5 in supplemental material. Details regarding evaluation of the
152 predictive power of the model are provided in Supporting Information S3.

153
154 2.2 Experimental Methods

155 2.2.1 Strains, cultivation conditions, subcellular fraction enrichment protocols, and
156 analytical assays

Heterozygous deletion mutants *HO/Δho*, *ARH1/Δarh1*, *ATM1/Δatm1* and *YFH1/Δyfh1* of *S. cerevisiae* strain BY4743 (background: *MATa/Δ his3Δ1/his3Δ1 leu2Δ0/leu2Δ0 lys2Δ0/LYS2 MET15/met15Δ0 ura3Δ0/ura3Δ0*) were employed in this study (Brachmann et al., 1998). Deletion of a single copy was verified by PCR using the confirmation primers described in (Brachmann et al., 1998). Qiagen DNeasy Blood & Tissue Kit was used for isolation and purification of DNA from the cell extracts as described in the manufacturer's protocol. Analytical assays were carried out employing enzymatic or colorimetric methods. Details regarding those analytical assays, as well as those of the cultivation conditions and the subcellular fraction enrichment protocols are provided in Supporting Information S3. All data pertaining these analyses are provided in Supporting Information S5 in supplemental material.

3. RESULTS

3.1 Iron metabolism in yeast metabolic models

Although the predictive power of the yeast metabolic network model has improved substantially over the years, it is still limited by the omission or incomplete representation of some pathways in the model. Our previous work on the Yeast 7 metabolic network model highlighted the fact that the high metabolic burden (characterised by high reaction fluxes, and often indicative of the low efficiency of their cognate enzymes (Bonarius et al., 1996)) carried by pathways involved in energy generation and processes imposed limitations on the model's predictive ability (Dikicioglu, Kırdar, & Oliver, 2015). A recent analysis that we carried out by constraining this model by fluxes calculated using the intracellular concentrations of intermediates in the purine nucleotide biosynthetic

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180 pathway, as determined by HPLC analysis (Hesketh, Vergnano, Wan, & Oliver, 2017),
181 demonstrated that the prediction of growth rate was at least half or twice the
182 experimentally determined value. The distribution of the fluxes indicated that the iron
183 uptake and utilisation pathways were inactive because they were inadequately
184 represented in the model and completely disconnected from the rest of the metabolic
185 network (Figure 1a). We addressed each of the deficiencies through extensive literature
186 curation and will explain how iron metabolism was incorporated into the network model
187 in the following sections.

188
189 3.1.1 Uptake, intracellular transport, and storage of iron

190 Both reductive (Fe^{3+} - transporting, high affinity) and non-reductive (Fe^{2+} - transporting,
191 low affinity) iron uptake mechanisms were incorporated into the metabolic network.
192 High-affinity iron uptake, as both free and xenosiderophore-bound iron, was represented
193 by the reductive pathway. The intracellular transport of iron and complex iron entities,
194 such as haem and sirohaem, across intracellular boundaries and the storage of residual
195 components and excess iron were also considered Figure 1b). Iron export is not known to
196 be exhibited by *S. cerevisiae* (Haas, Eisendle, & Turgeon, 2008), and so was excluded.

197 The concentration limit to determine the lower bound of the flux through the low-
198 affinity iron uptake reactions was set at $1\mu\text{M}$ (Lesuisse, Blaiseau, Dancis, & Camadro,
199 2001). The high- and low-affinity uptake systems were modelled as working
200 independently of one another. However, in the absence of a functional low-affinity
201 system, the high-affinity system will be used, even in the presence of abundant iron (and
202 *vice versa*); these situations are allowed for in the model (Haas et al., 2008; Lesuisse et

al., 2001). Specific ARN family transporters involved in the uptake of each iron-bound xenosiderophore and the fate of each xenosiderophore in the yeast cell was modelled individually for ferriochrome, N,N',N''-triacetylfulvarinine C (TAFC), enterobactin and ferrioxamine B (see Supporting Information S2 in supplemental material) (Haas et al., 2008). The reductive assimilation of iron bound to xenosiderophores was facilitated by one of the functionally non-interchangeable metalloredutases (Fre1p – 4p) (Yun, Bauler, Moore, Klebba, & Philpott, 2001) and all members of the family of mannoproteins (Fit1p – 3p) that are incorporated into the cell wall *via* glycosylphosphatidylinositol (GPI) anchors in *S. cerevisiae* (Haas et al., 2008).

The mechanism of copper recruitment by the reductive pathway of high-affinity iron uptake (Philpott, 2006) necessitated the incorporation of copper uptake into the metabolic network. Since copper metabolism was not represented in the primary metabolic network of yeast to any degree, the network was extended to incorporate the uptake of copper and its function in high-affinity iron uptake. It is important to note that the representation of copper was not exhaustive; only activities that are relevant to iron metabolism were considered in this reconstruction. The threshold for switching between high- and low-affinity copper transport was set as 20 μ M (Hassett, Dix, Eide, & Kosman, 2000). The threshold concentrations were employed to calculate a threshold flux boundary to be employed in the model. Two assumptions were made in modelling the uptake of copper across the cell envelope: (i) Although included as a unique species in the model, the high-affinity copper transporter Ctr3p was not associated with the copper uptake reaction in the model along with Ctr1p. This exclusion was necessary since the *CTR3* gene, found in strains of the S288C lineage that were employed in this study, has

226 been inactivated by insertion of a Ty2 transposon (Knight, Labbé, Kwon, Kosman, &
227 Thiele, 1996). (ii) Fre1p copper reductase was similarly excluded from gene-reaction
228 associations since it was reported to be active only during the first 3-4 hours post-
229 inoculation (Georgatsou & Alexandraki, 1994). The *in silico* analyses conducted in this
230 study were all carried out using pseudo-steady-state assumption; by that time, Fre2p was
231 thought to determine copper reductase activity.

233 3.1.2 Biosynthesis and recycling of complex iron entities

234 The biosynthesis and recycling of haem, sirohaem and Fe/S clusters were fully
235 implemented in the genome-scale model of the yeast metabolic network. The synthesis of
236 5-aminolevulinate from glycine and succinyl-CoA *via* the Shemin pathway (Ferreira &
237 Gong, 1995) was introduced and 5-aminolevulinate uptake was excluded from the model.
238 Haem catabolism in the endoplasmic reticulum, and the storage of bilirubin in the
239 vacuole were also introduced to the model *de novo* (Figure 1b).

240 A pseudo-metabolite - mitochondrial empty scaffold (ES) - was introduced to the
241 metabolic network in order to model Fe-S cluster biogenesis (the ISC machinery) in the
242 mitochondria and Fe-S cluster assembly (the CIA machinery) in the cytosol and nucleus.
243 This allowed the maturation of the Fe-S clusters and the ensuing transfer to their cognate
244 apoenzymes (Johnson, Dean, Smith, & Johnson, 2005; Lill et al., 2012; Lill &
245 Mühlenhoff, 2006; Urzica, Pierik, Mühlenhoff, & Lill, 2009). Although this scaffold is
246 thought to be a transient protein complex (Lill & Mühlenhoff, 2008), we associate the
247 members of this complex with a “reaction” step in the metabolic model that converts an
248 empty scaffold into a sulphonylated scaffold (SS). The ES is then released in the next

step once the Fe-S cluster itself was formed. Both 2Fe-2S and 4Fe-4S cluster maturation have been assigned to the mitochondrion, cytosol, or nucleus as applicable. Two different mitochondrial 4Fe-4S maturation routes have been implemented to account for the genetic determination of 4Fe-4S cluster maturation for lipoic acid synthesis (by Lip5p) and succinate dehydrogenase (encoded by *SDH2*) or for other mitochondrial Fe-S proteins (denoted as H1 or H2 in Figure 1c, respectively) (Lill & Mühlenhoff, 2008).

3.1.3 The Iron regulon

Two different regulatory mechanisms for iron uptake *via* the iron regulon were implemented in this model: (i) the yeast-specific haem-regulated positive feedback route (Lill & Mühlenhoff, 2008), and (ii) the mitochondrial Fe-S cluster biogenesis-associated negative feedback route.

Haem deficiency, indicated by the deactivation of the enzymes encoded by the essential genes (*HEM1-4*, *HEM12*, *HEM13*, *HEM15*) of the pathway, was reported to be an indicator of low iron uptake in yeast (Lill & Mühlenhoff, 2008). We coupled the essential enzymes of haem biosynthesis to the reaction representing low-affinity iron uptake catalysed by Fet4p to account for this positive feedback mechanism **by associating these essential enzymes with the low-affinity iron uptake reaction**. This coupling with low-affinity iron uptake ensured that haem biosynthesis would not be over-activated by the network unless extracellular iron was abundant.

The negative feedback on iron uptake by Fe/S cluster biogenesis is shut down upon iron depletion. This was modelled by introducing two new pseudo-metabolites: AS signalling the depletion of intracellular iron, and PS indicating the intracellular

availability of iron (SBO:0000409 term: interaction outcome). AS activated the iron regulon in the nucleus, relaying a message to the cell envelope to activate the uptake of iron (Figure 1d). PS was coupled with the formation of Fe-S apoclusters in the mitochondrion. This was done by introducing PS as a metabolite in the Fe-S cluster biogenesis reaction, thus ensuring that the reaction would have flux as long as PS, i.e. iron, was available. Unavailability of iron produced AS, which was then relayed from the mitochondrion to the nucleus and further to the cell envelope, unchanged. Msn5p, a karyopherin shuttling between the nucleus and the cytoplasm, was assigned a modified function in the model, being associated with the transport of PS from the cell envelope back to the mitochondrion, thus representing the relay of the signal for the presence of iron in the cell. Aft1p, which is responsible for relaying the iron depletion signal to the cell boundary, was reported to have an additional role in creating iron resources for the cell by binding Cth2p to facilitate the degradation of the mRNAs for iron-containing enzymes (Cherry et al., 2012b). This route was excluded from the network since the model does not treat enzymes as either the substrates or products of reactions. Aft1p was also reported to mediate saving iron by activating Vth1p-mediated biotin uptake since biotin synthesis was reported to be iron consuming (Shakoury-Elizeh et al., 2004). This route was also excluded since biotin co-enzyme metabolism was not considered to be of direct interest to our system.

291

292 3.2 Iron family cofactor considerations of metabolic enzymes

293 Iron family cofactors, copper ions, and pyridoxine (the last is employed in only one
294 reaction) were employed as substrates and untransformed reactants in those reactions that

295 were catalysed by enzymes activated by these cofactors, as described in ‘*Cofactor*
296 *representation*’. This allowed us to establish the connectivity between iron metabolism,
297 described above, and the primary metabolic network of yeast. For this purpose, the
298 copper, iron, haem, sirohaem, pyridoxine and Fe-S requirements of the metabolic
299 network were identified (see Supporting Information S6 and S7 in supplemental material)
300 (De Freitas et al., 2003; Johnson et al., 2005; Lill et al., 2012; Terali, 2010). A variety of
301 reasons led us to exclude 41 enzymes reported to involve iron cofactors from this
302 compilation: the documented information was observed to conflict with other available
303 information; the enzyme was not included in the Y7.6 version of the yeast metabolic
304 network model, or the protein was associated with a regulatory task (see Supporting
305 Information S8 in supplemental material) (De Freitas et al., 2003; Johnson et al., 2005;
306 Lill et al., 2012). The metabolic enzymes with iron-binding attributes in the
307 reconstruction Y7.Fe included all metabolic enzymes whose empirically verified non-
308 ubiquitous iron-binding properties were reported in UniProt, and which were assigned to
309 the iron-ion binding Molecular Function Gene Ontology (GO:0005506) (both databases
310 accessed on 01/08/2018). The reconstruction captured 24 (60% of existing empirical
311 data), including such enzymes identified through literature mining and curation additional
312 to those reported in the public databases (see Supporting Information S9 in supplemental
313 material for detailed information on these comparisons).

315 3.3 Consideration of cell growth by indirect association with the biomass equation

316 Although the elemental iron content of yeast has long been determined (Lange &
317 Heijnen, 2001), experimental data are not available on how much iron content existing

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yeast biomass constituents possess or on the relative content of potential key iron-containing compounds that could potentially be included, and therefore, it was not possible to incorporate any direct involvement of iron into the biomass equation. Given this dearth of available data, simply adding an iron ion term would result in the iron flux being syphoned off towards biomass, bypassing the metabolic network. Even without a representation of the iron content in biomass components, our model is able to predict the essentiality of iron for the cell indirectly, and correctly predicts that yeast becomes inviable upon complete depletion of iron from the extracellular environment.

Given the above limitations, and following the conduct of a *Gedankenexperiment*, we propose an approach for the incorporation of iron species in the definition of biomass, and consequently, in the biomass equation of the metabolic network. For this purpose, we identified which amino acids bind different types of iron entities and in what ratios (Table 1). The relative abundances of proteins that have functional iron entities in comparison to the global proteome were extracted from Paulo *et al.* (Paulo et al., 2016). The stoichiometric coefficients of the iron entities to be incorporated into the biomass equation were calculated from the stoichiometric coefficients of the amino acids that could potentially bind (see Supporting Information S10 for details on the calculation).

3.4 Reconstruction of the extended stoichiometric model and general design considerations

Reconstruction of the model involved the modification of 4 existing species (all metabolites), 13 species types (11 metabolites and 2 enzymes), and 53 existing reactions, as well as the removal of 3 reactions from Y7.6. Some 90 species types (68 enzymes, 18

metabolites and 4 pseudo-metabolites), representing 173 species (67 enzymes, 11 pseudo-metabolites and 95 metabolites), and 104 new enzymatic and transport reactions were introduced to the model. Here, 'species' denotes both metabolites and enzymes as the standard nomenclature adopted in the model. Thus the new version of the model, Y7.Fe, has improved the gene coverage of the existing model by 6%.

Reactions, which were reported to take place at the membrane but did not have a detailed mechanism explained, were represented to occur across the membrane. This device simplified the model without compromising on the details of iron metabolism. The enzymes associated with these reactions were localised to the membrane in order to highlight the transmembrane nature of the reaction. Pseudo-metabolites were introduced such that they did not interfere with the material, energy, or redox balances of the network. They were introduced in coupled reactions in order to avoid accumulation, and these reactions were unbounded so that the system was not constrained by the flux limitations through these reactions when the underdetermined system was optimised for a given objective.

Only 14 new dead-end metabolites could be detected in Y7.Fe, indicating that the extension by incorporation of iron metabolism did not disrupt the connectivity of the metabolic network. All dead-end metabolites were new species in the iron model, and were individually curated for their use and functionality within the network. The Fe-S clusters matured in the nucleus are not recruited by the metabolic enzymes in the current reconstruction. However, this process was included in order to enable future extensions of the model, albeit at the cost of introducing phosphate and mature 4Fe-4S species as dead-end metabolites in the nucleus. Other dead-end metabolites were introduced through

cyclic interconversions: PS (extracellular), NADPH, NADP, FMN, and FMNH₂ (in vacuole), and FMNH₂ (in the mitochondria). Some by-products of iron metabolism are allowed to accumulate in the yeast cell as reported in the literature: bilirubin and ferrioxamineB (in the vacuole), coprogen, ferrichrome, and enterobactin (in the cytoplasm). L-cysteine is transported into the mitochondrion in our model for the assembly of the sulphonylated scaffold for Fe-S cluster formation. Although recent reports have suggested a putative cysteine synthase (Mcy1p) identified in the mitochondrial outer membrane (Hughes, Hughes, Henderson, Yazvenko, & Gottschling, 2016), this mechanism has not yet been extensively investigated and so was excluded. The biomass-modified version of the model (Y7.FeBM; Supporting Information S11) had the same number of dead ends and yielded similar predictions on growth rate to the original model re-constructed in this study.

Some 97% of the reactions contained in Y7.Fe were comparable to those of Y7.6 and only 823 (ca. 23%) reactions had non-zero fluxes when the unit glucose uptake rate was employed as the single constraint for optimising growth. Of those 823 reactions, the flux through only 229 remained the same and the difference in fluxes through 254 of the remaining reactions was more than 25%. This indicated that introduction of iron metabolism into the genome-scale metabolic model resulted in a substantial rewiring of nearly one third of the active reactions in the model under standard growth conditions. The predicted growth flux was reduced by 7% in Y7.Fe (see Supporting Information S5 in supplemental material), indicating the cost of the iron metabolism to the existing network. This high metabolic burden was most likely to be associated with energy generation, and could not be captured by Y7.6. This observation was in line with the

growth predictions obtained by constraining the fluxes through the purine pathways in our preliminary analysis. Revisiting the same system, the flux predictions improved substantially employing Y7.Fe with only a $\pm 20\%$ difference between the experimentally measured and predicted growth fluxes, at the cost of lower predictive accuracy of the growth phenotype. Indeed, an analysis of those reactions, which displayed more than 25% change in their flux between Y7.6 and Y7.Fe, showed that they were associated with genes that were significantly enriched for the nucleoside phosphate metabolism process term ($p\text{-value} < 10^{-38}$) along with other metabolic processes in line with our observations on the analysis involving the purine intermediates employed as flux constraints. We carried out a sensitivity analysis to investigate robustness by selecting the fluxes that displayed a change more than 15-35% (in 5% increments), and observed that the genes encoding the enzymes that catalysed these reactions were significantly enriched for the same, or very similar processes (see Supporting Information S5 in supplemental material). The variability of the flux distributions was taken into consideration in conducting this analysis (for details of the method, see Supporting Information S3 in supplemental material).

The analysis of the fluxes in the biomass-modified model, Y7.FeBM, indicated that the magnitude of only 8% of the fluxes were altered as a response to this change and that the magnitude of the change was minimal (Supporting Information S10). The modifications were proportional enrichment in the fluxes for the production of the iron entities that were incorporated into the biomass equation. Despite being far from providing a complete picture due to the problems regarding data availability discussed above, this exercise of incorporating iron entities into biomass definition demonstrated

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410 that, in fact, it was the incorporation of the iron metabolism into the network that caused
411 extensive rewiring of the fluxes when iron was taken into consideration as a metabolic
412 cofactor, rather than the part Fe-proteins played in the biomass.

413 The predictive power of the Y7.Fe model was further investigated by determining
414 its ability to define gene essentiality. The extended model was observed to perform very
415 similarly to the existing primary model, Y7.6, with only marginal differences in measures
416 evaluating predictive power of the model despite a sizeable improvement of 6% in gene
417 coverage (Table 2). Major improvements and extensions in the metabolic network model
418 structures were previously observed to have substantial negative effects on the predictive
419 power as a trade-off (Aung et al., 2013). Both Y7.Fe and Y7.6 models performed
420 similarly in predicting gene essentiality, indicating that the additional 14 dead-end
421 metabolites introduced in our reconstruction did not affect the quality of the existing
422 model.

423
424 3.4 Iron-recruiting enzyme requirements of the metabolic network model

425 The stoichiometry of the cofactors introduced into the reactions was observed to be
426 closely related to the predictions of growth rate, which meant that such predictions were
427 very sensitive to the metabolic requirement for iron in the network. The total iron
428 requirement of the cell was calculated from the iron composition of a standard defined
429 medium for yeast (Chiu & Segrè, 2008), and the recruitment of iron or complex iron
430 entities as cofactors by the enzymes was simulated based on the constraint imposed by
431 the iron transport flux. Fine-tuning for the sustainable iron recruitment indicated that the
432 stoichiometric coefficients for these terms need to be in the order of magnitude of 10^{-14} if

the supply of iron is not to reduce the rate of growth (Figure 2). The metabolic requirement of total turnover for iron-recruiting enzymes was determined as 3.02×10^{-11} mmol / g (biomass)⁻¹ h⁻¹ based on this model. The maximum and minimum theoretical requirements for iron-recruiting enzymes were determined by investigating the variability of these fluxes. This analysis demonstrated that the cell employs the pathways where minimal iron recruitment of the cognate enzymes would be required, possibly to improve the energy efficiency of the system. The total turnover was only marginally (0.02%) higher than that computed for the theoretical minimum usage. On the other hand, we observed that the fluxes through these pathways would be rewired such that the turnover of iron-recruiting enzymes would be increased by 34% (Supporting Information S5).

The stoichiometric coefficients for cofactors were determined to be very low, as expected by their biological context. Although iron was not among the trace element cofactors, the stoichiometric coefficients were determined to be in the magnitude of 10^{-14} (see *Evaluation of the predictive power of the model* in Materials & Methods). An alternative strategy to determine enzyme abundances from the reaction flux and the turnover rate of these enzymes (k_{cat}) could be evaluated to replace the stoichiometric coefficient strategy. Iron, being a micronutrient, is usually provided in the growth medium at a low concentration. Therefore, constraining enzyme abundances by iron availability constrains the reaction flux altogether, since the k_{cat} for each reaction would remain constant. Even making a favourable selection of k_{cat} values based on available data, the constraint on iron availability indicated that material flow through high-flux reactions, such as those involved with the mitochondrial respiratory chain, would then adopt impractically low values to satisfy the constraint on iron availability and

compromise growth rate substantially. This indicated that the limiting factor concerning iron metabolism was the availability of iron, not the enzyme turnover rates, necessitating the modulation of reaction stoichiometry.

Working with such small numbers also imposes technical constraints on the analysis. The precision of the machine and the solver employed can both cause problems at this stage. For the current analyses, the precision of both the machine and Gurobi (Gurobi Optimizer Version 3.0. Houston, Texas: Gurobi Optimization, Inc., April 2010, <http://www.gurobi.com/>) were two orders of magnitude lower than the stoichiometric coefficients, allowing us a robust platform to conduct the analyses independent of whether the MATLAB or the Python version of Cobra was utilised. Several tests were run in order to ensure that Gurobi did not treat the stoichiometric coefficients as zero, and that the performance of the solver was not compromised (as described in Supplementary Material 3). However, for less abundant cofactors, this is an issue that needs to be addressed.

3.5 Benchmarking the model against environmental and genetic challenges

Having established the iron-recruiting enzyme requirement of the metabolic network, we extended the investigation to understand how the *in silico* system adapted to environmental challenges that were tailored specifically to exploit this model. The response of the network to different levels of extracellular iron and copper availability was investigated through flux distributions. For this purpose, the upper and lower bounds of the fluxes through several reactions were set to zero to mimic reports available in the literature (Haas et al., 2008; Lesuisse et al., 2001). The high-affinity iron uptake system

was activated by blocking the routes through low affinity Fe^{2+} uptake routes. The absence of extracellular xenosiderophores was also taken into consideration for the simulation of an *S. cerevisiae* monoculture. The predictions on flux distributions were in agreement with the expected physiological outcome on how the yeast metabolism responded to low or high abundance of copper (Cankorur-Cetinkaya et al., 2013; Vest et al., 2016) or iron (Holmes-Hampton, Jhurry, McCormick, & Lindahl, 2013; Vest et al., 2016) (Table 3).

We then investigated how Y7.Fe could be used to study the impact of the deletion of the genes *ARH1*, *ATM1* or *YFHI* or a reduction in the functionality of their protein products, which are all essential components of the ISC machinery. All three genes are essential, although only *arh1* deletants could be identified as inviable employing the model. This implies that *YFHI* (the Fe-S cluster scaffold protein) and *ATM1* (the Fe-S apocluster transporter) have essential functions outside of the metabolic network, perhaps for the supply of Fe-S clusters for essential non-enzyme proteins.

Despite their essentiality, the hemizygous mutants of these genes in the diploid BY4743 genetic background did not produce any significant growth defects (p-value <0.01) with the specific growth rate for all mutants remaining within $0.43 \pm 0.01 \text{ h}^{-1}$ as also indicated by the model predictions. Our experiments demonstrated that the hemizygous mutants did not display significant differences (p-value <0.01) with respect to their utilisation of glucose or ammonium as carbon and nitrogen sources, respectively, nor in their production of ethanol or glycerol. On average, the hemizygous mutants were observed to consume more iron per unit optical density equivalent number of cells although this difference was not observed to be significant due to the high variance between replicates. However, a significant difference in the intracellular distribution of

502 copper was observed between these mutants and the wild type was observed. That said,
503 measurements of intracellular haem, copper, reduced or total iron content of the mutants
504 gave no further insight into the essential roles of *ARHI*, *YFHI* and *ATMI* inside or
505 outside metabolism (Supporting Information S5).

506 The reactions with non-zero fluxes were more often catalysed by enzymes
507 encoded by essential genes (2.32-fold over-enrichment; $p\text{-value} < 10^{-40}$) in Y7.Fe than in
508 Y7.6. In line with this observation, *ARHI* was widely associated with reactions having
509 non-zero fluxes in the metabolic network. *ARHI* being an essential gene also for the
510 model, the reorganisation of the fluxes in the network could only be investigated by
511 introducing an “*in silico* reduction of function”. We employed flux as a proxy for the
512 functional capacity of the enzyme catalysing that reaction and lowered the flux value by
513 50% to mimic the impact of heterozygosity. The flux bounds that were set to 50% of their
514 wild-type flux value did not relate to nutrient uptake fluxes; therefore, they did not
515 change the nutrient limitation of the system and this has been confirmed by the glucose
516 uptake flux being maintained at its upper bound limit under both conditions.
517 Consequently, the predicted growth rate was reduced by 50% in response to limiting the
518 flux through the reaction catalysed by *ARHI* at 50% of its original value, the expected
519 outcome for the remaining non-zero-fluxes was to be reduced by 50%, or to remain
520 unchanged. However, 14% of all fluxes were observed to be rewired or had changed by a
521 factor other than a 50% reduction.

522 Some 22% of the enzymes and transporters represented in Y7.Fe (963 in total)
523 associated with 506 fluxes were affected by these changes. The rewiring of the fluxes
524 was predominantly observed to involve lipid metabolism ($p\text{-value} < 10^{-11}$). Furthermore,

fluxes were observed to be rewired away from the metabolism of glycine and serine family of amino acids ($p\text{-value} < 10^{-6}$) towards the metabolism of neutral lipids ($p\text{-value} < 10^{-4}$). The enzymes associated with the reactions that displayed unexpected variations in the magnitude of their fluxes were significantly associated with oxidative phosphorylation ($p\text{-value} < 10^{-40}$), aerobic respiration ($p\text{-value} < 10^{-30}$), and purine nucleotide metabolism ($p\text{-value} < 10^{-72}$).

Among the reactions with unexpectedly altered fluxes, 28% were orphan reactions, mostly involved in small molecule transport or exchange, for which the relevant gene has yet to be identified. Many of these reactions were involved with the transport or exchange of lipid metabolism intermediates across organelles, as well as of amino acids including glycine, L-alanine, L-leucine, serine, and valine, and of small inorganic molecules including ammonia, bicarbonate, carbon dioxide, hydronium ion, oxygen, phosphate, and water (Supplementary Material 3).

The rewiring of lipid metabolism and the changes in the fluxes in the energy pathways in response to a perturbation induced to mimic the reduction of *ARHI* function in the cell was in line with earlier findings on its role in biological systems. Apart from acting as an essential component of the ISC machinery, the Arh1 protein is an ortholog of the human adrenodoxin reductase (Manzella, Barros, & Nobrega, 1998), which was reported to function in the mitochondrial electron transfer chain that catalyses the conversion of cholesterol into pregnenolone. Expression of human *ARHI* on a retroviral vector was shown to restore the LDL receptor function in cells from patients suffering from familial hypercholesterolemia (Eden et al., 2002), demonstrating the enzyme's role in neutral lipid metabolism, as also captured by our analysis in the model yeast system.

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548 Because iron cofactors, specifically Fe-S clusters, were employed extensively as
549 cofactors by enzymes catalysing mitochondrial reactions (particularly those that affect
550 energy generation routes *via* aerobic respiration), constraining the flux of such a reaction
551 was observed to lead to a reduction in the oxygen uptake flux, also by 50%. This was
552 observed not only upon imposing limitations on iron uptake, but also upon rendering of
553 the Fe-S cluster biogenesis fluxes low, as demonstrated by the simulations carried out to
554 mimic the impact of genetic modifications on the metabolic network. This example also
555 demonstrated the tight links across the metabolic network. Because the flow of material
556 (i.e. flux) through the reactions, which were catalyzed by iron-requiring enzymes, would
557 not be isolated from the flux through those that did not require iron-bearing enzymes. The
558 fluxes through reactions which (in theory) had no direct relationship with iron
559 metabolism were also affected in response to this extension of the model.

560 The extended model of the yeast metabolic network now serves as a functional
561 platform to study rare disorders associated with the iron metabolism, as well as those of
562 other ions to the extent of their involvement in iron-associated pathways. *ARH1*, studied
563 extensively above, encodes the yeast homolog of the adrenodoxin reductase, and
564 mutations in the human gene are reported to be responsible for auditory neuropathy and
565 optic atrophy (Paul et al., 2017). The model also allowed us to simulate the impairment of
566 *CCC2*, the copper-transporting ATPase, mutations in whose human homolog, *ATP7B*, is
567 responsible for Wilson’s disease (Cankorur-Cetinkaya et al., 2013; Júlvez, Dikicioglu, &
568 Oliver, 2018). Using the model, we were able to demonstrate a critical impairment
569 associated with this disorder – namely, that under conditions of high oxygen availability,

the deletion of *CCC2* impaired growth in the absence of copper supplementation (Table 3).

4. DISCUSSION

The complex network of interactions between enzymes, metabolites, and their regulators defines transitions between metabolic states. Metabolic state shifts mediate adaptive responses that allow cells to respond to environmental or genetic perturbations. Such shifts in the state of metabolism may be desirable in some cases, such as biotechnological applications, or most unwelcome in other situations such as switching to a diseased state that may induce cancer or other conditions. Genome-scale models of the metabolic network are of central importance since they allow us to achieve a better understanding of how the fluxes can be rewired in response to an internal or external input, and thus have been frequently employed in biotechnological applications as a prediction tool, since the aim is often to obtain a preferred flux distribution (Kerkhoven, Lahtvee, & Nielsen, 2014). Iron has an important role in a range of biotechnological applications from improving human nutrition (Puig, Andres-Ccolas, Garcia-Molina, & Penarrubia, 2007) to the production of recombinant proteins (Eck et al., 2018), and healthcare applications concerning iron storage abnormalities (Valerio, 2007). The incorporation of an extensive, well-curated iron metabolism in metabolic networks may greatly enhance the opportunities metabolic models offer for applications in red, green, or white biotechnology.

This paper has presented a comprehensive extension of the genome-scale stoichiometric model of the yeast metabolic network by incorporating the involvement of

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ion cofactors, which are not, themselves, consumed in the metabolic reactions in which they are involved. We selected the iron ion as our test case as it is involved in nearly 10% of all enzymatic steps in the yeast metabolic network. A substantial number of non-metabolic proteins also recruit iron cofactors. Although iron species to be employed by non-metabolic proteins can be produced by the metabolic network model, they remain as dead-end metabolites since these models do not include non-metabolic biological processes. In its current form, introducing the empirical iron requirement of yeast as a constraint for the metabolic network would yield an inevitable overestimation of the iron requirement for metabolism, since all of the iron transported across the cell boundary can theoretically be utilised metabolically. Nevertheless, the quantitation of distinct iron-containing cofactor species contributing to the biomass would allow an improved definition of biomass composition to be established, which would indirectly account for the iron species requirements of non-metabolic proteins, resolving this problem of overestimation.

Although this study was specific to iron, we contend that our work has provided a new approach for handling co-enzymes and co-factors in stoichiometric models of metabolism, and that this approach can be generalised for other such entities. We made use of pseudo-metabolites, which were not produced or consumed by the cell, in modelling the system. We employed this formalism since these intermediates, functioning in cyclic interconversion pathways, allowed a more explicit description of the molecular mechanisms represented in the model. The Y7.Fe model allowed us to define the optimal turnover rate of iron cofactors in the metabolic network, something which is not possible to achieve experimentally using current analytical technologies. The method

provided a means to estimate enzyme fluxes from reaction fluxes and cofactor availability. Proteomics data available at the global scale can, at present, only provide us with the relative quantitation of some enzymes; therefore, empirical protein abundance data do not afford us the means to evaluate our predictions. However, we note once again that ion cofactor availability, rather than empirically determined enzyme turnover rates, was more prominent as a limiting factor in determining the predictions that can be made using the Y7.Fe model. Therefore, we believe our method provides a very reasonable estimate of the iron-recruiting enzyme requirements of the metabolic network under defined circumstances, which is currently not possible with any other method.

Our model represents an unconventional way of extending metabolic network models to incorporate non-metabolic information. The ion cofactors are ‘non-metabolic’ in the sense that they are conserved moieties that are not, themselves, transformed by metabolic reactions. Although they can be considered as “pseudometabolites”, these cofactors proved highly effective in altering the distribution of fluxes through the metabolic network. The flux distribution would not have been substantially affected were it not for the involvement of cofactors taken up and biosynthesized by the new reactions introduced into the metabolic network model. This distribution can now be constrained not only by the macronutrient (e.g. glucose) availability, but also by the availability of an essential micronutrient, i.e. iron. The ability to incorporate the roles of such ion cofactors could prove essential for constructing models of biological systems at the level of the whole cell or organism.

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856 TABLES

857 Submitted as separate files (extension: .doc).

858

859 FIGURES

860 Submitted as separate files (extension: .tiff).

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862 FIGURE CAPTIONS

863 **Figure 1.** Schematic representation of iron metabolism in the yeast model. Pathways and

864 metabolites are represented by uppercase and lowercase letters, respectively.

865 Directionality of the fluxes through the pathway is specified by arrows (for single

866 reaction steps) and block arrows (for lumped consecutive reaction steps). Metabolic

867 enzymes are shown in teal colour. The cell and organelle boundaries are represented as

868 double dashed lines; the mitochondrion, nucleus, vacuole and ER have cartoon

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representations. The minimal representation of iron metabolism in the existing Yeast 7.6 model is provided in (a). The details on the reductive, non-reductive, and xenosiderophore-bound iron uptake, intracellular transport and storage of iron, haem and sirohaem biosynthetic and degradation pathways are provided in (b). Details regarding the biogenesis of Fe-S clusters in the mitochondrion (ISC machinery), and the maturation of apoenzymes (A) into Fe-S cluster-bound holoenzymes (H) in the mitochondrion (ISC machinery), in the cytosol, and in the nucleus (CIA machinery) are provided in (c). An empty scaffold (ES) and its sulphonylated form (SS) were introduced as pseudo-metabolites in the Fe-S cluster formation mechanism. The regulation of iron uptake *via* the iron regulon, employing the negative feedback from Fe-S cluster biogenesis, is demonstrated in (d). The shuttling of the signals representing the availability of mitochondrial iron (PS) and its depletion (AS) were introduced as pseudo-metabolites to modulate and activate the reductive iron uptake routes. For simplifications of the function and activity of the iron regulon, see Text.

Figure 2. Indispensable role of iron for yeast. This plot demonstrates how growth rate predictions of the metabolic network model are affected by the amount of iron recruited by the metabolic enzymes. The stoichiometric coefficient of iron ions and complex iron entities to be recruited by iron requiring enzymes without impairing growth substantially can be determined based on the constraints imposed by the experimentally permissible limits of iron uptake.

SUPPORTING INFORMATION CAPTIONS

891 **Supporting Information S1** Extended model of the metabolic network of yeast (SBML
892 level 2, version 4) (file format: .xml).

893 **Supporting Information S2** Details on the extended model. The modifications carried
894 out on the primary model, the new species types, and the new species (including both
895 genes and metabolites) are provided in separate worksheets. The reactions that are
896 introduced into the network are described and provided along with their gene associations
897 accompanied by the logical rules for these genes (whenever applicable), the reversibility
898 rules, the literature/database evidence for the reaction, and the upper and lower bounds of
899 each reaction in the last worksheet (file format: .xlsx).

900 **Supporting Information S3** Text providing the details on the methods employed in
901 modelling and experimental variation (file format: .docx).

902 **Supporting Information S4** Simulation code for the analyses conducted as described in
903 the text (file format: .m).

904 **Supporting Information S5** Worksheet on flux distributions and predictions of viability.
905 The evaluation of the distribution of fluxes between the Y7.Fe and Y7.6, the growth
906 predictions for single-gene deletants and double-gene deletants, the distribution of fluxes
907 for reduced flux through the reactions catalysed by Arh1p, and the flux variability
908 analyses for determining the enzyme abundance upper- and lower-bounds are provided
909 in separate tabs (file format: .xlsx).

910 **Supporting Information S6** Table summarising the Fe-S cluster requirements of
911 metabolic enzymes employed in the metabolic network model Y7.6 (file format: .docx).

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Supporting Information S7 Table summarising the iron family cofactor requirements of the enzymes and active transporters of the Y7.6 yeast metabolic network model (file format: .docx).

Supporting Information S8 Table summarising the enzyme-cofactor relationships excluded from this reconstruction and detailed reasons for exclusion (file format: .docx).

Supporting Information S9 Detailed comparison of iron-ion binding enzymes in Y7.Fe and those reported in UniProt and those associated with the iron-ion binding Molecular Function Gene Ontology Term (GO:0005506) are provided in a single worksheet (file format: .xlsx).

Supporting Information S10 Details on calculation of the new biomass equation with iron entities. Details regarding the calculation of the stoichiometric coefficients of iron entities in the biomass equation, and the flux distributions with the new model (denoted as Y7.FeBM) are provided in separate worksheets (file format: .xlsx).

Supporting Information S11 Extended model of the metabolic network of yeast with iron entities incorporated into the biomass equation (SBML level 2, version 4) (file format: .xml).

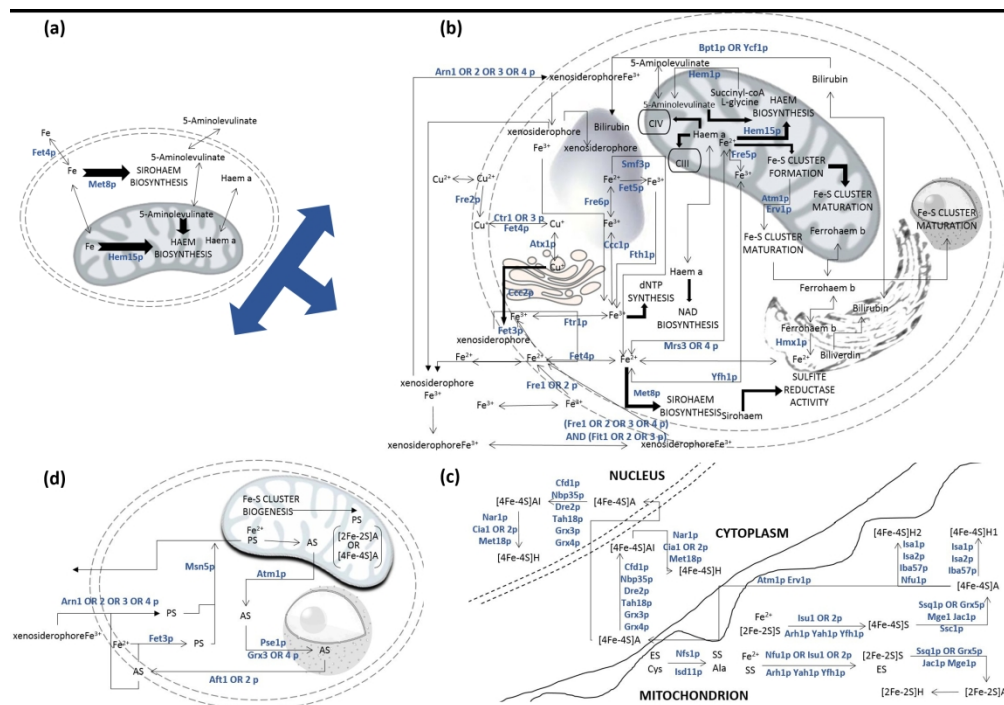


Figure 1. Schematic representation of iron metabolism in the yeast model. Pathways and metabolites are represented by uppercase and lowercase letters, respectively. Directionality of the fluxes through the pathway is specified by arrows (for single reaction steps) and block arrows (for lumped consecutive reaction steps). Metabolic enzymes are shown in teal colour. The cell and organelle boundaries are represented as double dashed lines; the mitochondrion, nucleus, vacuole and ER have cartoon representations. The minimal representation of iron metabolism in the existing Yeast 7.6 model is provided in (a). The details on the reductive, non-reductive, and xenosiderophore-bound iron uptake, intracellular transport and storage of iron, haem and sirohaem biosynthetic and degradation pathways are provided in (b). Details regarding the biogenesis of Fe-S clusters in the mitochondrion (ISC machinery), and the maturation of apoenzymes (A) into Fe-S cluster-bound holoenzymes (H) in the mitochondrion (ISC machinery), in the cytosol, and in the nucleus (CIA machinery) are provided in (c). An empty scaffold (ES) and its sulphonylated form (SS) were introduced as pseudo-metabolites in the Fe-S cluster formation mechanism. The regulation of iron uptake via the iron regulon, employing the negative feedback from Fe-S cluster biogenesis, is demonstrated in (d). The shuttling of the signals representing the availability of mitochondrial iron (PS) and its depletion (AS) were introduced as pseudo-metabolites to modulate and activate the reductive iron uptake routes. For simplifications of the function and activity of the iron regulon, see Text.

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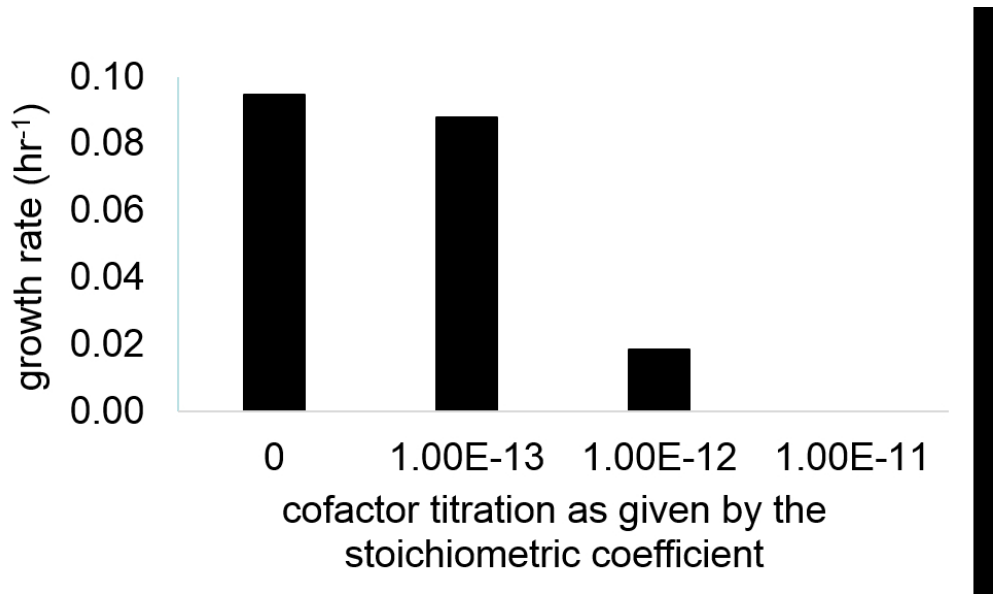


Figure 2. Indispensable role of iron for yeast. This plot demonstrates how growth rate predictions of the metabolic network model are affected by the amount of iron recruited by the metabolic enzymes. The stoichiometric coefficient of iron ions and complex iron entities to be recruited by iron requiring enzymes without impairing growth substantially can be determined based on the constraints imposed by the experimentally permissible limits of iron uptake.

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Table 1 Amino acid – iron entity binding relationships in biomass definition

Iron entity	Attached amino acid	Binding ratio per iron entity	Reference
4Fe-4S	cysteine	2	(Andreini, Bertini, Cavallaro, Najmanovich, & Thornton, 2009)
4Fe-4S (biotin synthase)	arginine	2	(Andreini et al., 2009)
2Fe-2S (Rieske)	histidine-cysteine	2 – 2	(Andreini et al., 2009)
2Fe-2S (non-Rieske)	cysteine	4	(Andreini et al., 2009)
Haem b	cysteine	1	(Li, Bonkovsky, & Guo, 2011)
Haem c	cysteine	2	(Li et al., 2011)
Fe(III) - mono	cysteine	4	(Andreini et al., 2009)

Table 2 Evaluation of the predictive power of the extended model

	Y7.6	Y7.Fe
Number of genes	908	963
Number of TP	677	709
Number of TN	83	84
Number of FP	73	90
Number of FN	76	80
PPV (%)	90	89
NPV (%)	52	48
Sensitivity (%)	90	90
Specificity (%)	53	48
Predictive success (%)	84	82

Table 3 Performance table for benchmarking the model predictions with empirical observations^a

	Y7.Fe predictions		Empirical observations	
	O ₂ uptake	Growth	O ₂ uptake	Growth
High iron available in the extracellular space	↔	↔	↔	↔
Low iron available in the extracellular space	↓	↓	↓	↓
High copper available in the extracellular space	↔	↔	↔	↔
Low copper available in the extracellular space	↔	↔	↔	↔
Hemizygosity in <i>ARH1</i>	↓	↔	↓	↔
<i>Δccc2/ Δccc2</i>	↓	↔	↓	↔
<i>Δccc2/ Δccc2</i> – no copper supplementation	↔	↓	↔	↓

^a ↑: increase against control, ↓: decrease against control, ↔: remains constant

Species modifications

s_0924 ironII [cytoplasm]
 s_0925 ironII [extracellular]
 s_0926 ironII [mitochondrion]
 s_1739 ironII [boundary]

Species type modifications

t_0359 FAD
 t_0360 FADH2
 t_0368 ferroheme b
 t_0400 heme a
 t_0446 ironII
 t_0473 L-cysteine
 t_0562 NADP
 t_0563 NADPH
 t_0591 oxygen
 t_0608 phosphate
 t_0641 pyridoxine
 t_0943 GRX3
 t_1054 GRX4

Reaction modifications

r_0001 include 1E-14 s_1913 (mitochondrial hemeC) in both products and substrates
 r_0002 include 1E-14 s_1913 (mitochondrial hemeC) in both products and substrates
 r_0004 include 1E-14 s_0712 (mitochondrial ferrohemeB) and 1E-14 s_1913 (mitochondrial hemeC)
 r_0023 include 1E-14 s_1891 (4Fe-4S for non-mitochondrial holoproteins) in both products and sub:
 r_0027 include 1E-14 s_1885 (4Fe-4S for other holoproteins) in both products and substrates
 r_0060 include 1E-14 s_1891 (4Fe-4S for non-mitochondrial holoproteins) in both products and sub:
 r_0081 include 1E-14 s_1641 (pyridoxine) in both products and substrates
 r_0229 include 2E-14 s_1891 (4Fe-4S for non-mitochondrial holoproteins) in both products and sub:
 r_0233 include 1E-14 s_3714 (cytoplasmic hemeA) in both products and substrates
 r_0238 include 2E-14 s_1626 (cytoplasmic Fe3+) in both products and substrates
 r_0239 include 2E-14 s_1626 (cytoplasmic Fe3+) in both products and substrates
 r_0240 include 2E-14 s_1626 (cytoplasmic Fe3+) in both products and substrates
 r_0241 include 2E-14 s_1626 (cytoplasmic Fe3+) in both products and substrates
 r_0242 include 2E-14 s_1626 (cytoplasmic Fe3+) in both products and substrates
 r_0255 include 1E-14 s_3714 (cytoplasmic hemeA) in both products and substrates
 r_0256 include 1E-14 s_1904 (peroxisomal hemeA) in both products and substrates
 r_0259 include 1E-14 s_1902 (ER hemeA) and E-14 s_1903 (ER Fe3+) in both products and substrate
 r_0260 include 1E-14 s_1902 (ER hemeA) and E-14 s_1903 (ER Fe3+) in both products and substrate
 r_0261 include 1E-14 s_1902 (ER hemeA) and E-14 s_1903 (ER Fe3+) in both products and substrate
 r_0262 include 1E-14 s_1902 (ER hemeA) and E-14 s_1903 (ER Fe3+) in both products and substrate
 r_0267 include 1E-14 s_1902 (ER hemeA) and E-14 s_1903 (ER Fe3+) in both products and substrate
 r_0268 include 1E-14 s_1902 (ER hemeA) and E-14 s_1903 (ER Fe3+) in both products and substrate
 r_0269 include 1E-14 s_1902 (ER hemeA) and E-14 s_1903 (ER Fe3+) in both products and substrate
 r_0270 include 1E-14 s_1902 (ER hemeA) and E-14 s_1903 (ER Fe3+) in both products and substrate
 r_0280 include 1E-14 s_1885 (4Fe-4S for other holoproteins) in both products and substrates
 r_0302 include 1E-14 s_1885 (4Fe-4S for other holoproteins) in both products and substrates
 r_0317 include 1E-14 s_3714 (cytoplasmic hemeA) in both products and substrates
 r_0352 include 1E-14 s_1885 (4Fe-4S for other holoproteins) in both products and substrates

r_0437 include 1E-14 s_0712 (mitochondrial ferrohemeB) and 1E-14 s_1913 (mitochondrial hemeC)
 r_0438 include 2E-14 s_0811 (mitochondrial hemeA) in both products and substrates
 r_0439 include 2E-14 s_1914 (mitochondrial hemeC1), 2E-14 s_0712 (mitochondrial ferrohemeB), 1E-14 s_1884 (2Fe-2S for holoprotein) in both products and substrates
 r_0472 include 1E-14 s_1891 (4Fe-4S for non-mitochondrial holoproteins) in both products and substrates
 r_0530 include 1E-14 s_1884 (2Fe-2S for holoprotein) in both products and substrates
 r_0542 include 1E-14 s_1885 (4Fe-4S for other holoproteins) in both products and substrates
 r_0694 include 1E-14 s_3714 (cytoplasmic hemeA) in both products and substrates
 r_0761 include 1E-14 s_1885 (4Fe-4S for other holoproteins) in both products and substrates
 r_0763 include 1E-14 s_3714 (cytoplasmic hemeA) in both products and substrates
 r_0920 include 1E-14 s_1902 (cytoplasmic hemeA) in both products and substrates
 r_0922 include 1E-14 s_1902 (ER hemeA) and E-14 s_1903 (ER Fe³⁺) in both products and substrates
 r_0974 gene rule changed to ((YER070W OR YIL066C OR YGR180C) AND YJL026W), 2E-14 s_1626 (cyt
 r_0975 gene rule changed to ((YER070W OR YIL066C OR YGR180C) AND YJL026W), 2E-14 s_1626 (cyt
 r_0976 gene rule changed to ((YER070W OR YIL066C OR YGR180C) AND YJL026W), 2E-14 s_1626 (cyt
 r_0977 gene rule changed to ((YER070W OR YIL066C OR YGR180C) AND YJL026W), 2E-14 s_1626 (cyt
 r_0978 gene rule changed to ((YER070W OR YIL066C OR YGR180C) AND YJL026W), 2E-14 s_1626 (cyt
 r_0979 gene rule changed to ((YER070W OR YIL066C OR YGR180C) AND YJL026W), 2E-14 s_1626 (cyt
 r_1021 include 1E-14 s_0712 (mitochondrial ferrohemeB), 1E-14 s_1884 (2Fe-2S for holoprotein), 2E-14 s_1626 (cyt
 r_1027 include 1E-14 s_1430 (cytoplasmic siroheme) and 1E-14 s_1891 (4Fe-4S for non-mitochondrial holoproteins) in both products and substrates
 r_1102 delete 5'-aminolevulinate transport
 r_1178 delete ironII transport from ext to cyt
 r_1621 delete 5'-aminolevulinate exchange
 r_2182 include 1E-14 s_1902 (ER hemeA) and E-14 s_1903 (ER Fe³⁺) in both products and substrates
 r_2183 include 1E-14 s_1902 (ER hemeA) and E-14 s_1903 (ER Fe³⁺) in both products and substrates
 r_2305 include 1E-14 s_1891 (4Fe-4S for non-mitochondrial holoproteins) in both products and substrates

to account for delete
 low copper concentration r_1291
 high copper concentration r_1292
 low iron concentration r_1290
 high iron concentration r_1289

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For Peer Review

in both products and substrates

1E-14 s₁₈₈₄ (2Fe-2S for holoprotein) and 1E-14 s₁₆₄₀ (mitochondrial copperI) in both products and substrates

s
cytoplasmic Fe³⁺) in both products and substrates
cytoplasmic Fe³⁺) in both products and substrates
cytoplasmic Fe³⁺) in both products and substrates
cytoplasmic Fe³⁺) in both products and substrates
cytoplasmic Fe³⁺) in both products and substrates
cytoplasmic Fe³⁺) in both products and substrates
1E-14 s₁₈₈₆ (4Fe-4S for Lip5p and Sdh2p holoprotein) in both products and substrates
ial holoproteins) in both products and substrates

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For Peer Review

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2	New species type
3	% t_2026 CTR3
4	t_2018 ironIII
5	t_2019 copperI
6	t_2020 copperII
7	t_2021 FRE1
8	t_2022 FRE2
9	t_2023 FET3
10	t_2024 FTR1
11	t_2025 CTR1
12	t_2027 YFH1
13	t_2028 MRS3
14	t_2029 MRS4
15	t_2030 CCC1
16	t_2031 FRE6
17	t_2032 SMF3
18	t_2033 FET5
19	t_2034 FTH1
20	t_2035 ATX1
21	t_2036 CCC2
22	t_2037 MSN5
23	t_2038 FRE5
24	t_2039 HMX1
25	t_2040 BPT1
26	t_2041 YCF1
27	t_2042 biliverdin
28	t_2043 carbonmonoxide
29	t_2044 bilirubin
30	t_2045 coprogen
31	t_2046 ferrichrome
32	t_2047 TAFC
33	t_2048 enterobactin
34	t_2049 ferrioxamineB
35	t_2050 coprogenFeIII
36	t_2051 ferrichromeFeIII
37	t_2052 TAFCFeIII
38	t_2053 enterobactinFeIII
39	t_2054 ferrioxamineBFeIII
40	t_2055 ARN1
41	t_2056 ARN2
42	t_2057 ARN3
43	t_2058 ARN4
44	t_2059 FRE3
45	t_2060 FRE4
46	t_2061 FIT1
47	t_2062 FIT2
48	t_2063 FIT3
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t_2064	empty scaffold
t_2065	S-sulfanyl scaffold
t_2066	2Fe-2S on scaffold
t_2067	4Fe-4S on scaffold
t_2068	2Fe-2S for apoprotein
t_2069	4Fe-4S for other apoproteins
t_2070	Fe4-S4 for Lip5p and Sdh2p apoproteins
t_2071	2Fe-2S for holoprotein
t_2072	4Fe-4S for other holoproteins
t_2073	4Fe-4S for Lip5p and Sdh2p holoprotein
t_2074	4Fe-4S for non-mitochondrial apoproteins
t_2075	4Fe-4S intermediate for non-mitochondrial apoproteins
t_2076	4Fe-4S for non-mitochondrial holoproteins
t_2077	NFU1
t_2078	ISU1
t_2079	ISU2
t_2080	NFS1
t_2081	ISD11
t_2082	SSQ1
t_2083	JAC1
t_2084	MGE1
t_2085	SSC1
t_2086	ISA1
t_2087	ISA2
t_2088	IBA57
t_2089	ATM1
t_2090	ERV1
t_2091	CFD1
t_2092	NBP35
t_2093	DRE2
t_2094	TAH18
t_2095	CIA1
t_2096	CIA2
t_2097	MET18
t_2098	PS
t_2099	AS
t_2100	NAR1
t_2101	PSE1
t_2102	AFT1
t_2103	AFT2
t_2104	hemeC
t_2105	hemeC1
t_2106	CYC3
t_2107	CYT2

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2		Newspecies	
3	s_0718	FMNH2 [mitochondrion]	e_1054 FRE1 [cell envelope]
4	s_1624	ironII [vacuole]	e_1055 FRE2 [cell envelope]
5	s_1625	ironIII [extracellular]	e_1056 FET3 [cell envelope]
6	s_1626	ironIII [cytoplasm]	e_1057 FTR1 [cell envelope]
7	s_1627	ironIII [mitochondrion]	e_1058 CTR1 [cell envelope]
8	s_1628	ironIII [vacuole]	% e_1059 CTR3 [cell envelope]
9	s_1629	copperI [cytoplasm]	e_1060 YFH1 [mitochondrion]
10	s_1630	copperII [extracellular]	e_1061 MRS3 [mitochondrial n
11	s_1631	ironII [cell envelope]	e_1062 MRS4 [mitochondrial n
12	s_1632	ironIII [cell envelope]	e_1063 CCC1 [vacuole]
13	s_1633	copperI [cell envelope]	e_1064 FRE6 [vacuole]
14	s_1634	copperII [cell envelope]	e_1065 SMF3 [vacuolar membr
15	s_1635	NADPH [cell envelope]	e_1066 FET5 [vacuolar membr
16	s_1636	NADP [cell envelope]	e_1067 FTH1 [vacuolar membr
17	s_1637	oxygen [cell envelope]	e_1068 ATX1 [cytoplasm]
18	s_1638	NADPH [vacuole]	e_1069 CCC2 [golgi membrane
19	s_1639	NADP [vacuole]	e_1070 GRX4 [nucleus]
20	s_1640	copperI [mitochondrion]	e_1071 FRE5 [mitochondrion]
21	s_1641	pyridoxine [mitochondrion]	e_1072 HMX1 [endoplasmic re
22	s_1642	FMN [cell envelope]	e_1073 BPT1 [vacuolar membr
23	s_1643	FMNH2 [cell envelope]	e_1074 YCF1 [vacuolar membr
24	s_1644	heme a [cell envelope]	e_1075 ARN1 [cell envelope]
25	s_1645	FMN [vacuole]	e_1076 ARN2 [cell envelope]
26	s_1646	FMNH2 [vacuole]	e_1077 ARN3 [cell envelope]
27	s_1647	heme a [vacuole]	e_1078 ARN4 [cell envelope]
28	s_1648	copperI [vacuole]	e_1079 FRE3 [cell envelope]
29	s_1649	oxygen [vacuole]	e_1080 FRE4 [cell envelope]
30	s_1650	ferroheme b [cytoplasm]	e_1081 FIT1 [cell envelope]
31	s_1651	ferroheme b [endoplasmic reticulum]	e_1082 FIT2 [cell envelope]
32	s_1652	biliverdin [endoplasmic reticulum]	e_1083 FIT3 [cell envelope]
33	s_1653	carbon monoxide [endoplasmic reticulum]	e_1084 NFU1 [mitochondrion]
34	s_1654	carbon monoxide [cytoplasm]	e_1085 ISU1 [mitochondrion]
35	s_1655	carbon monoxide [extracellular]	e_1086 ISU2 [mitochondrion]
36	s_1826	ironII [endoplasmic reticulum]	e_1087 NFS1 [mitochondrion]
37	s_1827	bilirubin [endoplasmic reticulum]	e_1088 ISD11 [mitochondrion]
38	s_1828	bilirubin [cytoplasm]	e_1089 SSQ1 [mitochondrion]
39	s_1829	bilirubin [vacuole]	e_1090 JAC1 [mitochondrion]
40	s_1846	coprogen [extracellular]	e_1091 MGE1 [mitochondrion]
41	s_1847	coprogen [cell envelope]	e_1092 SSC1 [mitochondrion]
42	s_1848	coprogen [cytoplasm]	e_1093 ISA1 [mitochondrion]
43	s_1849	coprogenFeIII [cell envelope]	e_1094 ISA2 [mitochondrion]
44	s_1850	coprogenFeIII [extracellular]	e_1095 IBA57 [mitochondrion]
45	s_1851	coprogenFeIII [cytoplasm]	e_1096 ATM1 [mitochondrial r
46	s_1852	ferrichrome [extracellular]	e_1097 ERV1 [mitochondrial m
47	s_1853	ferrichrome [cell envelope]	e_1098 CFD1 [cytoplasm]
48	s_1854	ferrichrome [cytoplasm]	e_1099 NBP35 [cytoplasm]
49	s_1855	ferrichromeFeIII [cell envelope]	e_1100 DRE2 [cytoplasm]
50	s_1856	ferrichromeFeIII [extracellular]	e_1101 TAH18 [cytoplasm]
51	s_1857	ferrichromeFeIII [cytoplasm]	e_1102 CIA1 [cytoplasm]
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s_1858	T AFC [extracellular]	e_1103	CIA2 [cytoplasm]
s_1859	T AFC [cell envelope]	e_1104	MET18 [cytoplasm]
s_1860	T AFC [cytoplasm]	e_1105	NAR1 [cytoplasm]
s_1861	T AFCFeIII [cell envelope]	e_1106	CFD1 [nucleus]
s_1862	T AFCFeIII [extracellular]	e_1107	NBP35 [nucleus]
s_1863	T AFCFeIII [cytoplasm]	e_1108	DRE2 [nucleus]
s_1864	enterobactin [extracellular]	e_1109	TAH18 [nucleus]
s_1865	enterobactin [cell envelope]	e_1110	CIA1 [nucleus]
s_1866	enterobactin [cytoplasm]	e_1111	CIA2 [nucleus]
s_1867	enterobactinFeIII [cell envelope]	e_1112	MET18 [nucleus]
s_1868	enterobactinFeIII [extracellular]	e_1113	NAR1 [nucleus]
s_1869	enterobactinFeIII [cytoplasm]	e_1114	MSN5 [cytoplasm]
s_1870	ferrioxamineB [extracellular]	e_1115	PSE1 [cytoplasm]
s_1871	ferrioxamineB [cell envelope]	e_1116	AFT1 [cytoplasm]
s_1872	ferrioxamineB [cytoplasm]	e_1117	AFT2 [cytoplasm]
s_1873	ferrioxamineBFeIII [cell envelope]	e_1118	GRX3 [nucleus]
s_1874	ferrioxamineBFeIII [extracellular]	e_1119	CYC3 [mitochondrion]
s_1875	ferrioxamineBFeIII [cytoplasm]	e_1120	CYT2 [mitochondrion]
s_1876	ferrioxamineB [vacuole]		
s_1877	empty scaffold [mitochondrion]		
s_1878	S-sulfanyl scaffold [mitochondrion]		
s_1879	2Fe-2S on scaffold [mitochondrion]		
s_1880	4Fe-4S on scaffold [mitochondrion]		
s_1881	2Fe-2S for apoprotein [mitochondrion]		
s_1882	4Fe-4S for other apoproteins [mitochondrion]		
s_1883	4Fe-4S for Lip5p and Sdh2p apoproteins [mitochondrion]		
s_1884	2Fe-2S for holoprotein [mitochondrion]		
s_1885	4Fe-4S for other holoproteins [mitochondrion]		
s_1886	4Fe-4S for Lip5p and Sdh2p holoprotein [mitochondrion]		
s_1887	4Fe-4S for non-mitochondrial apoproteins [cytoplasm]		
s_1888	4Fe-4S for non-mitochondrial apoproteins [nucleus]		
s_1889	4Fe-4S intermediate for non-mitochondrial apoproteins [cytoplasm]		
s_1890	4Fe-4S intermediate for non-mitochondrial apoproteins [nucleus]		
s_1891	4Fe-4S for non-mitochondrial holoproteins [cytoplasm]		
s_1892	4Fe-4S for non-mitochondrial holoproteins [nucleus]		
s_1893	L-cysteine [mitochondrion]		
s_1894	phosphate [nucleus]		
s_1895	PS [cytoplasm]		
s_1896	PS [mitochondrion]		
s_1897	AS [cytoplasm]		
s_1898	AS [mitochondrion]		
s_1899	AS [nucleus]		
s_1900	AS [cell envelope]		
s_1901	PS [extracellular]		
s_1902	heme a [endoplasmic reticulum]		
s_1903	ironIII [endoplasmic reticulum]		
s_1904	heme a [peroxisome]		
s_1905	coprogen [boundary]		
s_1906	ferrichrome [boundary]		
s_1907	T AFC [boundary]		

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2	s_1908	enterobactin [boundary]
3	s_1909	ferrioxamineB [boundary]
4	s_1910	ironIII [boundary]
5	s_1911	copperII [boundary]
6	s_1912	carbon monoxide [boundary]
7	s_1913	heme c [mitochondrion]
8	s_1914	heme c1 [mitochondrion]
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	ReIDs	ReactantIDs		DirectionalProductIDs	Enzymes (OR relationships not specified)	PMIDs	Description	KEGGID	Bounds	Open																			
1	r_1282	s_10925		e_13631	→		transportofhexaraculaurintritoctocellenvelope																						
2	r_1283	s_1630		e_13634	→		transportofestraculaurintritoctocellenvelope																						
3	r_1284	s_1625	s_10542	e_13643	s_1636	1.00E-14 s_1644	2183029	8164662	ferriredoxin:azotobactercellenvelope	R00092	lb=0																		
4	r_1285	s_1634	s_1635	e_13633	s_1636				cupredoxin:azotobactercellenvelope	R00092	lb=0																		
5	r_1286	s_1207		e_13636	→		transportofcytoplasmicADPto:cellenvelope																						
6	r_1287	s_1212		e_13635	→		transportofcytoplasmicADPto:cellenvelope																						
7	r_1288	4.00E-14 s_1629	4 s_1631	4 s_1632	4.00E-14 s_1629	2 s_1349	e_1056	AND	e_1069	AND	e_1068	12572678	9162052	multicopperoxidase	R00078	lb=0,ub=0.0001													
8	r_1289	s_1632	s_1900	→	e_1626	s_1895	e_1057					8599111		highaffinitynitritetransmembranepermase		lb=0,ub=0.0001													
9	r_1290	s_1631		→	e_0787	e_0924	→	e_0787				7529320		lowaffinityiron/metaltransporter		lb=0.0001,ub=INF													
10	r_1291	s_1633		→	e_1629		→	e_0767				11523804		lowaffinityiron/metaltransporter		lb=0.002,ub=INF													
11	r_1292	4 s_1853		→	e_1627		→	e_1058				10242521	15012137	highaffinitycoppertransporter		lb=0,ub=0.002													
12	r_1293	4 s_10794	s_1275	4 s_0924	→	e_1060	→	e_1060				10428861		mitochondrialacetylcholinesterase	R00078	lb=0													
13	r_1294	s_0924		→	e_0926		→	e_1061	e_1062			1703236		irontransporter_mitochondrion		lb=0													
14	r_1295	s_1628		→	e_1628		→	e_1063				13191044		vacuolartromanginetransporter		lb=0													
15	r_1296	s_1638	s_1628	s_1645	1.00E-14 s_1647	→	e_1624	s_1639	s_1646	1.00E-14 s_1647	→	e_1064		ferriredutase	R00092	lb=0													
16	r_1297	s_1624		→	e_0924		→	e_1065				11027260		vacuolartromingpor		lb=0													
17	r_1299	s_1629		→	e_1640		→							transportofsuperoxidefromcytoplasmto:mitochondrion															
18	r_1300	s_3714		→	e_1644		→							transportofhemefromcytoplasmto:cellenvelope															
19	r_1301	s_3714		→	e_1647		→							transportofhemefromcytoplasmto:cellenvelope															
20	r_1302	s_1627	s_0716	s_1214	1.00E-14 s_0811	→	e_0718	s_1210	s_0926	1.00E-14 s_0811	→	e_1071		ferriredutase	R00092	lb=0													
21	r_1303	s_1275		essential as_1649	→									ferriredutase															
22	r_1304	s_1629		→	e_1648		→							transportofcytoplasmicvacuole															
23	r_1305	4.00E-14 s_1648	4 s_1624	4 s_0802	s_1649	→	4 s_1628	2 s_1080	4.00E-14 s_1648	→	e_1066		multicopperoxidase	R00078	lb=0														
24	r_1306	s_1628		→	e_1626		→	e_1067				10268875		vacuolartromipermase		lb=0,ub=0.0001													
25	r_1307	s_0712		→	e_1650		→							transportofsuperoxidefromcytoplasmto:vacuole															
26	r_1308	s_1650		→	e_1651		→	e_1653	s_1826	3 s_1208	3 s_0804	e_1072		transportofhemefromcytoplasmto:endoplasmicreticulum	R00011	lb=0													
27	r_1309	3 s_12776	s_1651	3 s_1213	3 s_0795	→	e_1652	s_1895						transportofcarbonmonoxidefromendoplasmicreticulumto:cytoplasm															
28	r_1310	s_1653		→	e_1654		→					17144670		exportofcarbonmonoxidefromcell															
29	r_1311	s_1654		→	e_1655		→							transportofironfromendoplasmicreticulumto:cytoplasm															
30	r_1312	s_1826		→	e_0924		→							biliverdinreductase	R02293	lb=0													
31	r_1313	s_1652	s_1213	s_0795	→	e_1827	s_1208	→						transportofbiliverdinfromendoplasmicreticulumto:cytoplasm															
32	r_1314	s_1827		→	e_1828		→							vacuolartromidutetransporter															
33	r_1315	s_1828		→	e_1829		→					10790694		vacuolartromidutetransporter															
34	r_1316	s_1846	s_1625	→	e_1850		→					1780465		xenodendrophore_FeIIbinding		lb=0													
35	r_1317	s_1852	s_1625	→	e_1856		→					1780465		xenodendrophore_FeIIbinding		lb=0													
36	r_1318	s_1858	s_1625	→	e_1862		→					1780465		xenodendrophore_FeIIbinding		lb=0													
37	r_1319	s_1864	s_1625	→	e_1868		→					1780465		xenodendrophore_FeIIbinding		lb=0													
38	r_1320	s_1870	s_1625	→	e_1874		→					1780465		xenodendrophore_FeIIbinding		lb=0													
39	r_1321	s_1850	s_1900	→	e_1851	s_1895	→	e_1075	e_1077			18680426		highaffinityxenodendrophoretransport		lb=0,ub=0.0001													
40	r_1322	s_1851		→	e_1856	s_1848	→					18680426		FerriIIoxidationfromxenodendrophore		lb=0													
41	r_1323	s_1856	s_1900	→	e_1857	s_1895	→	e_1075	e_1077			18680426		highaffinityxenodendrophoretransport		lb=0,ub=0.0001													
42	r_1324	s_1857		→	e_1826	s_1854	→	e_1076				18680426		FerriIIoxidationfromxenodendrophore		lb=0													
43	r_1325	s_1862	s_1900	→	e_1863	s_1895	→	e_1076				18680426		highaffinityxenodendrophoretransport		lb=0,ub=0.0001													
44	r_1326	s_1863		→	e_1626	s_1860	→					18680426		FerriIIoxidationfromxenodendrophore		lb=0													
45	r_1327	s_1860		→	e_1858		→					18680426		TARFhydrolisandexcretion		lb=0													
46	r_1328	s_1861	s_1900	→	e_1869	s_1895	→	e_1078				18680426		highaffinityxenodendrophoretransport		lb=0,ub=0.0001													
47	r_1329	s_1869		→	e_1626	s_1866	→					18680426		FerriIIoxidationfromxenodendrophore		lb=0													
48	r_1330	s_1874	s_1900	→	e_1875	s_1895	→	e_1077				18680426		highaffinityxenodendrophoretransport		lb=0													
49	r_1331	s_1875		→	e_1626	s_1872	→					18680426		FerriIIoxidationfromxenodendrophore		lb=0,ub=0.0001													
50	r_1332	s_1872		→	e_1876		→					18680426		FerriIIoxidationfromxenodendrophore		lb=0													
51	r_1333	s_1850		→	e_1849		→							ferrioxalatetransportto:vacuole															
52	r_1334	s_1849	s_1635	s_1642	1.00E-14 s_1644	→	e_1847	s_1631	s_1636	s_1643	1.00E-14 s_1644	e_1054	e_1055	e_1079	e_1080	AND	e_1081	e_1082	e_1083	11120744		ferriredoxin:azotobactercellenvelope	R00092	lb=0					
53	r_1335	s_1847		→	e_1846		→							releaseofxenodendrophore								lb=0							
54	r_1336	s_1856		→	e_1855		→							xenodendrophore_eIItransportto:cellmembrane								lb=0							
55	r_1337	s_1855	s_1635	s_1642	1.00E-14 s_1644	→	e_1853	s_1631	s_1636	s_1643	1.00E-14 s_1644	e_1054	e_1055	e_1079	e_1080	AND	e_1081	e_1082	e_1083	11120744		ferriredoxin:azotobactercellenvelope	R00092	lb=0					
56	r_1338	s_1853		→	e_1852		→							releaseofxenodendrophore								lb=0							
57	r_1339	s_1862		→	e_1861		→							xenodendrophore_eIItransportto:cellmembrane								lb=0							
58	r_1340	s_1861	s_1635	s_1642	1.00E-14 s_1644	→	e_1859	s_1631	s_1636	s_1643	1.00E-14 s_1644	e_1054	e_1055	e_1079	e_1080	AND	e_1081	e_1082	e_1083	11120744		ferriredoxin:azotobactercellenvelope	R00092	lb=0					
59	r_1341	s_1859		→	e_1858		→							releaseofxenodendrophore								lb=0							
60	r_1342	s_1868		→	e_1867		→							xenodendrophore_eIItransportto:cellmembrane								lb=0							
61	r_1343	s_1867	s_1635	s_1642	1.00E-14 s_1644	→	e_1865	s_1631	s_1636	s_1643	1.00E-14 s_1644	e_1054	e_1055	e_1079	e_1080	AND	e_1081	e_1082	e_1083	11120744		ferriredoxin:azotobactercellenvelope	R00092	lb=0					
62	r_1344	s_1865		→	e_1864		→							releaseofxenodendrophore								lb=0							
63	r_1345	s_1874		→	e_1873		→							xenodendrophore_eIItransportto:cellmembrane								lb=0							
64	r_1346	s_1873	s_1635	s_1642	1.00E-14 s_1644	→	e_1871	s_1631	s_1636	s_1643	1.00E-14 s_1644	e_1054	e_1055	e_1079	e_1080	AND	e_1081	e_1082	e_1083	11120744		ferriredoxin:azotobactercellenvelope	R00092	lb=0					
65	r_1347	s_1871		→	e_1870		→							releaseofxenodendrophore								lb=0							
66	r_1348	s_1893	s_1877	2 s_0926	2 s_1878	s_1214	1.00E-14 s_1884	e_1097	s_1878	→				incorporationofphosphoribosylamylcascifold								lb=0							
67	r_1349	s_0799		→	e_1879	s_1210	s_1896	1.00E-14 s_1884	e_1084	e_1085	e_1086	AND	e_0222	AND	e_0938	AND	e_1060	10402803				lb=0							
68	r_1350	s_0799		2 s_0926	2 s_1879	s_1214	1.00E-14 s_1884	e_1080	s_1210	s_1896	1.00E-14 s_1884	e_1085	e_1086	AND	e_0222	AND	e_0938	AND	e_1060	18366324		lb=0							
69	r_1351	s_1879	s_0437	s_0756	s_0799	s_1214	1.00E-14 s_1884	e_1087	s_0437	s_0756	s_0799	2 s_1877	2 s_0752	s_1210	s_1896	e_1089	AND	e_1090	AND	e_1091	AND	e_0910	AND	e_1092	18621507		tetramericiron/sulphurclusterassembly		lb=0
70	r_1352	s_1880	s_0437	s_0756	s_0799	s_1214	→	e_1882	s_0397	s_1326	4 s_1877	2 s_0752	s_1210	s_1896	e_1089	AND	e_1090	AND	e_1091	AND	e_0910	AND	e_1092	23615440		removalofFe-Sclusterfromscifold		lb=0	
71	r_1353	s_1880	s_0437	s_0756	s_0799	s_1214	→	e_1883	s_0397	s_1326	4 s_1877	2 s_0752	s_1210	s_1896	e_1089	AND	e_1090	AND	e_1091	AND	e_0910	AND	e_1092	23615440		removalofFe-Sclusterfromscifold		lb=0	
72	r_1354	s_1881		→	e_1884		→							proteinnaturalizationbyFe-Sclustertransfer									lb=0						
73	r_1355	s_1882		→	e_1885		→							proteinnaturalizationbyFe-Sclustertransfer									lb=0						
74	r_1356	s_1883		→	e_1886		→							proteinnaturalizationbyFe-Sclustertransfer									lb=0						
75	r_1357	s_1882	s_0437	→	e_1887		→	e_1096	AND	e_1093	e_1094	AND	e_1095	→	e_1096	AND	e_1097	23615440					lb=0						
76	r_1358	s_1887	s_0434	→	e_1888	s_1894	s_0398	→	e_1098	AND	e_1099	AND	e_1100	AND	e_1101	AND	e_0181	e_0304	15728363				lb=0						
77	r_1359	s_1888	2.00E-14 s_1891	→	e_1889	2.00E-14 s_1891	→	e_1106	AND	e_1107	AND	e_1108	AND	e_1109	AND	e_1118	e_1070	23615440					lb=0						
78	r_1360	s_1889	2.00E-14 s_1891	→	e_1891	2.00E-14 s_1891	→	e_1102	AND	e_1103	AND	e_1104	AND	e_1105	→			23615440					lb=0						
79	r_1361	s_1890	2.00E-14 s_1891	→	e_1892	2.00E-14 s_1891	→	e_1110	s_1111	AND	e_1112	AND	e_1113	→				23615440					lb=0						
80	r_1362	s_1899		→	e_1891		→							proteinnaturalizationbyFe-Sclustertransfer									lb=0						
81	r_1363	s_1895		→	e_1896		→							proteinnaturalizationbyFe-Sclustertransfer															

Supplemental Methods

1 Modelling Methods

1.1 Model extension annotations and simulation environment

The extension annotations were documented in compliance with the MIRIAM standards (Le Novère et al., 2005); ChEBI (Hastings et al., 2013) and KEGG (Kanehisa et al., 2014) identifiers (IDs) of the compounds, KEGG (Kanehisa et al., 2014) and SGD (Cherry et al., 2012) IDs of the genes, UniProt (The UniProt Consortium, 2013) IDs of the enzymes, and KEGG (Kanehisa et al., 2014) IDs of the reactions were documented whenever applicable. PUBMED IDs (Roberts, 2001) of the relevant publications were provided as the resource if KEGG reaction IDs were not available. Logic rules for multiple genes encoding enzymes involved in the catalysis of a single reaction were derived from the literature (see Supporting Information S2 in supplemental material). Any signal transduction event was designated by the SBO:0000464 term: “state variable” in the model.

Model simulations were carried out in the MATLAB environment R2016b (9.1.0.441655, Mathworks, USA) with the COBRA Toolbox (v3.1.2), the SBML Toolbox v4.1.0 and libSBML library v5.15.0 running in the background employing standard linear optimisation techniques (Gurobi 8.0.1 - <http://www.gurobi.com/>). The COBRA Toolbox 2.0 Protocol Exchange (<https://www.nature.com/protocolexchange/protocols/2097#/procedure>) is provided as a guide to the different commands employed in this study (Hyduke et al., 2011). The objective function was to maximise growth.

It should be noted that the COBRA toolbox does not print the value for the same metabolite employed as reactant and product. However, this does not mean that it is not saved by COBRA, based on the observations made on the model simulations. The iron species represented as cofactors in the reactions are only listed among the products in their respective reactions. Nevertheless, there is flux through these reactions, and were these species only “produced” as implicated by COBRA reactant and product lists, since the model does not have an iron export flux, this situation should have had led to iron accumulation in the cell, and consequently rendered the system infeasible. This was shown not to be the case, therefore the iron within the cell must be recycled to compensate for this. So, although iron species do not appear as reactants, this does not mean that they are not considered as reactants in the metabolic network. To provide further support for this notion, we have conducted an analysis where the same cofactor was identified with different species IDs, which were interconvertible. By doing so, the COBRA Toolbox

indeed does recognise the same species with different IDs; however, the internal recycling of one species into the other modifies the system for each iron species to form a cyclic conversion, through which no flux needs to flow, in line with what is observed in other cyclic conversions in the model, for example, in flavin nucleotide interconversions. ***The system does not need iron uptake, and renders that flux zero, taking the model back to its original form (Y7.6), in practice.

The performance of Gurobi when working with close-to-zero values was evaluated in two ways: Since the utilization of values less than 10^{-10} would not be preferable and was thought to be treated as 0 in many applications, we tested this notion by rendering the iron uptake flux zero since this treatment of low numbers as zero would indicate that none of the metabolic reactions would require iron and, consequently, changing the iron uptake flux should make no difference to the simulations. However, in line with empirical data, iron was essential for the yeast 7.Fe metabolic network model; simulations in which iron uptake was not allowed did not yield any growth, indicating the non-zero treatment of the low stoichiometric coefficients by Gurobi. Additionally, we carried out performance tests on Gurobi to evaluate/highlight any potential issues that the close-to-zero numbers in the model would introduce. No numerical issues were identified in logs, and the condition number was sufficiently low as to suggest that there were no numerical issues with the use of close-to-zero values in the model. We further evaluated the performance by varying the “NumericFocus” parameter. Increasing the setting from 1 up to 3, despite extending the analysis time substantially, did not introduce changes affecting the LP solution at an integer placed at larger than the 5th significant digit.

1.2 Simulation approaches

In addition, a performance test was carried out to observe the effects of bounding constraints whenever available. Glucose uptake was assumed as $1\text{mmol} \cdot (\text{g biomass hr})^{-1}$ unless otherwise specified. Copper and iron requirements were adopted from (Baganz, Hayes, Marren, Gardner, & Oliver, 1997). Only the maximum upper limits of the uptake reactions were constrained as indicated by the medium compositions. Iron or copper were considered as “low” at 10% of their concentrations in the original medium formulation, and the system was thus constrained to maximally uptake the specified amount from the extracellular environment; r_1387, r_1861, and r_1388 constrained for the uptake of ironIII, ironII, and copperII, respectively. This action does not attempt to simulate situations where the metabolic network becomes limited for iron or copper; rather, it aims to investigate how high- and low-affinity

uptake systems in the metabolic network would behave *in silico* in response to high (i.e. above the threshold that would activate high-affinity ion uptake) or low (i.e. below the threshold that would activate high-affinity ion uptake) extracellular availability of iron or copper. The flux bounds (v) were derived from metabolite concentrations, $[c]$ (g/L) by

$$v \text{ (mmol g biomass}^{-1} \text{h}^{-1}) = \frac{[c](\text{gL}^{-1})}{\text{molecular weight (gmol}^{-1})} \times \frac{1000 \text{ mmol}}{1 \text{ mol}} \times \frac{1}{\text{biomass (gL}^{-1})} \times \text{growth rate (h}^{-1}).$$

The simulations assumed a constant growth at a rate of 0.1 hr⁻¹. Low-affinity uptake routes were blocked when simulating low extracellular iron availability. The flux through a reaction was constrained by setting both the upper and the lower bounds of a reaction to a given/selected value. For representing heterozygosity, a 50% reduction in the functionality of an enzyme was assumed to decrease the flux through the reactions it catalyses by 50%. Therefore, the fluxes through those reactions were constrained at 50% of the value under unperturbed simulation conditions. For those experiments where heterozygosity was investigated, experimental measurements on metabolites were also employed to constrain the fluxes. Ethanol and glycerol production fluxes per unit cell mass, which were calculated from the metabolite concentrations and growth rate, were employed to constrain the upper bound of the ethanol and glycerol export fluxes, using a similar approach to that adopted by (Dikicioglu, Kırdar, & Oliver, 2015).

Flux variabilities were considered in comparing the flux distributions obtained by Y7.Fe and Y7.6 as follows: For each model, the minimum and the maximum value that each individual flux could take was determined by flux variability analysis and any flux was considered different between the predictions obtained by two models if, and only if, the magnitude of that difference was greater than the magnitude of the difference between the minimum and the maximum value that flux could potentially take in either of the two models.

1.3 Cofactor representation

Iron ions, copper ions, pyridoxine, haem entities and Fe-S clusters were integrated as cofactors (X) in the model. The stoichiometry of the cofactors required for each reaction was designated by x . Although technically displayed as substrates and products, this representation prevents the actual production or depletion of any enzyme cofactors, through the maintenance of constant stoichiometric coefficients. This implementation allowed correct use of the relevant cofactors (X) of enzyme (N) without being produced or consumed in any reaction. The number of active sites on N was assumed to be 1 in all cases due to the unavailability of data. It may be that this leads to the overestimation of fluxes through specific reactions.

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1.4 Evaluation of the predictive power of the model

A Boolean criterion was adopted for the presence or absence of growth, where a positive or a negative call was defined as the presence (= 1) or absence (= 0) of growth, respectively. A true positive (TP) was a non-essential gene deletion mutant predicted as viable and a true negative (TN) was an essential gene deletion mutant predicted as inviable. A false positive (FP) designated a viable prediction for the deletion of an essential gene, whereas a false negative (FN) was assigned when the model yielded an inviable prediction for the deletion of a non-essential gene. The following success measures were employed to assess the predictions: *positive predictive value (PPN)* = $\frac{TP}{TP + FP}$, *negative predictive value (NPN)* = $\frac{TN}{TN + FN}$, *sensitivity* = $\frac{TP}{TP + FN}$, *specificity* = $\frac{TN}{TN + FP}$, and *predictive success* = $\frac{TP + TN}{TP + TN + FP + FN}$. Hypergeometric p-values were determined based on the cumulative distribution functions for determining under- or over-enrichment of factors.

2 Experimental Methods

2.1 Cultivation conditions, the subcellular fraction enrichment protocols, and analytical assays

Three separate cultures were grown to an OD₆₀₀ of 0.7 at 30°C in YPD medium, allowing sufficient aeration in vented-cap tissue culture flasks with low protein binding (TPP®; surface area (cm²) to height ratio (cm) = 300:4.5) with shaking (220 rpm). Fresh medium from the same batch was employed in further analytical assays. Culture supernatants were collected by centrifugation at 7.6k rpm for 10 min at 4°C. Cell wall digestion and lysis of the harvested cells (1 OD₆₀₀ equivalent) was carried out as described in Qiagen DNeasy Blood & Tissue Kit protocol, and crude cell extracts as well as the supernatant was stored at -20°C. Yeast Mitochondria Isolation Kit from Sigma-Aldrich (Cat no: MITOISO3) was used for the isolation of an enriched mitochondrial fraction from yeast cells starting from 20 OD₆₀₀ equivalent culture and intact mitochondria were stored -20°C until further use. The cytosol was separated from the cell's organelles by passage through an oil layer, employing AbCam's Cytosol/Particulate Rapid Separation Kit (Cat no: ab65398) from a 0.6 OD₆₀₀ equivalent culture. A vacuole-enriched fraction was isolated from 420 OD₆₀₀ equivalent yeast cells following a yeast-specific protocol as described (Rieder & Emr, 2001). Proteins in all fractions were precipitated in 20%w/v trichloroacetic acid at 4°C (Bolstad, Botelho, & Wood, 2010), and protein free-lysates were analysed separately.

The glucose, glycerol, ethanol and ammonium content of the supernatant were determined enzymatically by r-biopharm Roche Yellow Line assays (Cat nos: 10716251035, 10148270035, 10176290035, and 11112732035, respectively). Copper content, the total haem content, and the Fe^{2+} and total iron content of the samples post-reduction were determined colorimetrically employing the Copper Assay Kit from Sigma-Aldrich (Cat no: MAK127), BioAssay Systems QuantiChrom™ Heme Assay Kit (Cat no: DIHM-250), and the Iron Assay Kit by Sigma-Aldrich (Cat no: MAK025), respectively, as described by their manufacturers. Assays were executed in 96-well Corning® Costar® 96-well flat-bottom cell culture plates whenever applicable.

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3     clc;
4     model = readCbModel('#18-520_S1.xml');
5     model2 = readCbModel('#18-520_S11.xml');
6     a0 = optimizeCbModel(model);
7     a1 = optimizeCbModel(model2);
8     %flux variability analysis
9     [minFlux, maxFlux, Vmin, Vmax] = fluxVariability(model);
10    %detection of dead end metabolites
11    deadends = detectDeadEnds(model);
12    deadends2 = model.mets(deadends);
13    %single gene deletion analysis and flux distributions for ARH1 (e_0222),
14    YFH1 (e_1060), and
15    %ATM1 (e_1096) deletions
16    [grRatio, grRateKO, grRateWT, hasEffect, delRxns, fluxSolution] =
17    singleGeneDeletion(model);
18    % for low affinity ironIII uptake
19    model3 = removeRxns(model, 'r_1289');
20    a2 = optimizeCbModel(model3);
21    %for high affinity ironIII uptake
22    model4 = removeRxns(model, 'r_1290');
23    model4 = changeRxnBounds(model, 'r_1387', -0.00001, 'l');
24    a3 = optimizeCbModel(model4);
25    % for low affinity copperII uptake
26    model5 = removeRxns(model, 'r_1292');
27    a4 = optimizeCbModel(model5);
28    % for high affinity copperII uptake
29    model6 = removeRxns(model, 'r_1291');
30    model6 = changeRxnBounds(model, 'r_1388', -0.0002, 'l');
31    a5 = optimizeCbModel(model6);
32    %ARH1 hemizygosity simulation
33    model7 = changeRxnBounds(model, 'r_0530' 0.000000044, 'b');
34    a6 = optimizeCbModel(model7);
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Unit glucose flux constraint

Rxn ID	Y7.Fe	Y7.Fe max	Y7.Fe min	Rxn ID	Y7.6	Y7.6 max	Y7.6 min
r_0001	0	1.92E-05	0	r_0001	0	6.84E-05	0
r_0002	0	1.92E-05	0	r_0002	0	6.84E-05	0
r_0003	0	0	-2.41E-06	r_0003	0	0	-8.59E-06
r_0004	0	1.63E-05	0	r_0004	0	5.79E-05	0
r_0005	0.09984	0.0998399	0.09984	r_0005	0.10753	0.10753	0.107529
r_0006	0.09984	0.0998399	0.09984	r_0006	0.10753	0.10753	0.107529
r_0007	0.005833	0.0058348	0.005833	r_0007	0.006282	0.006288	0.006282
r_0012	0	2.91E-05	0	r_0012	0	0.000104	0
r_0013	0	1.34E-06	0	r_0013	0	4.77E-06	0
r_0014	8.71E-05	8.71E-05	8.71E-05	r_0014	9.38E-05	9.38E-05	9.38E-05
r_0015	8.71E-05	8.71E-05	8.71E-05	r_0015	9.38E-05	9.38E-05	9.38E-05
r_0016	0.016954	0.0169554	0.016954	r_0016	0.01826	0.018265	0.018259
r_0017	0	0	0	r_0017	0	0	0
r_0018	0.02518	0.0251814	0.02518	r_0018	0.027119	0.027125	0.027119
r_0019	0	9.33E-07	0	r_0019	0	3.32E-06	0
r_0020	0.038377	0.0383784	0.038185	r_0020	0.025044	0.025049	0.02436
r_0021	0	0	0	r_0021	0	0	0
r_0022	0	0	0	r_0022	0	0	0
r_0023	-0.02608	-0.026077	-0.02608	r_0023	-0.02809	-0.02809	-0.02809
r_0024	0	4.57E-05	0	r_0024	0	0.000163	0
r_0025	0.026077	0.0260791	0.026032	r_0025	0.028086	0.028092	0.027923
r_0026	0	1.34E-06	0	r_0026	0	4.77E-06	0
r_0027	0.02518	0.0251814	0.02518	r_0027	0.027119	0.027125	0.027119
r_0028	0	0	0	r_0028	0	0	0
r_0029	0	0.0001921	0	r_0029	0	0.000684	0
r_0030	0.026077	0.0260791	0.025885	r_0030	0.028086	0.028092	0.027402
r_0032	0.005041	0.005056	0.00504	r_0032	0.00543	0.005482	0.005425
r_0033	0	2.74E-05	0	r_0033	0	9.77E-05	0
r_0034	0	0	0	r_0034	0	0	0
r_0035	0	0	0	r_0035	0	0	0
r_0036	0	0	0	r_0036	0	0	0
r_0037	0	0	0	r_0037	0	0	0
r_0038	0.000174	0.0001742	0.000174	r_0038	0.000188	0.000188	0.000188
r_0039	0.038377	0.0383784	0.038377	r_0039	0.025044	0.025049	0.025044
r_0040	0.038377	0.0383784	0.038377	r_0040	0.025044	0.025049	0.025044
r_0041	3.79E-05	3.84E-05	3.72E-05	r_0041	4.08E-05	4.25E-05	3.95E-05
r_0042	0	0.0001921	0	r_0042	0	0.000684	0
r_0043	0	0	0	r_0043	0	0	0
r_0044	0	0	0	r_0044	0	0	0
r_0045	0.015124	0.0151242	0.015124	r_0045	0	0	0
r_0057	0	1.08E-05	0	r_0057	0	3.84E-05	0
r_0058	0.015124	0.0151242	0.015124	r_0058	0	0	0
r_0059	0	0	0	r_0059	0	0	0
r_0060	-0.02608	-0.026077	-0.02608	r_0060	-0.02809	-0.02809	-0.02809
r_0061	0.026077	0.0260791	0.026077	r_0061	0.028086	0.028092	0.028086
r_0062	0	2.36E-06	0	r_0062	0	8.40E-06	0
r_0063	0	9.33E-07	0	r_0063	0	3.32E-06	0
r_0064	0	1.69E-06	0	r_0064	0	6.00E-06	0

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2	r_0065	0.038377	0.0383784	0.038377	r_0065	0.025044	0.025049	0.025044
3	r_0066	0	1.52E-06	0	r_0066	0	5.43E-06	0
4	r_0067	0	1.52E-06	0	r_0067	0	5.43E-06	0
5	r_0068	0	4.57E-05	0	r_0068	0	0.000163	0
6	r_0069	0	0	0	r_0069	0	0	0
7	r_0070	0	0	0	r_0070	0	0	0
8	r_0072	0	1.81E-06	0	r_0072	0	6.44E-06	0
9	r_0073	0	0	-4.80E-05	r_0073	0	0	-0.00017
10	r_0074	0	4.80E-05	0	r_0074	0	0.000171	0
11	r_0075	0	1.34E-06	0	r_0075	0	4.77E-06	0
12	r_0076	0	4.80E-05	0	r_0076	0	0.000171	0
13	r_0077	0	4.80E-05	0	r_0077	0	0.000171	0
14	r_0078	0	4.80E-05	0	r_0078	0	0.000171	0
15	r_0079	0.023833	0.0238353	0.023833	r_0079	0.00938	0.009388	0.00938
16	r_0080	0.006194	0.0061983	0.006182	r_0080	0.006672	0.006682	0.006628
17	r_0081	7.04E-07	7.04E-07	7.04E-07	r_0081	7.58E-07	7.58E-07	7.58E-07
18	r_0082	0	4.80E-05	0	r_0082	0	0.000171	0
19	r_0083	0	4.80E-05	0	r_0083	0	0.000171	0
20	r_0084	0	0	0	r_0084	0	0	0
21	r_0085	0	0	0	r_0085	0	0	0
22	r_0086	0	1.34E-06	0	r_0086	0	4.77E-06	0
23	r_0087	0	1.34E-06	0	r_0087	0	4.77E-06	0
24	r_0088	0	0	-4.80E-05	r_0088	0	0	-0.00017
25	r_0089	0	2.40E-05	-4.80E-05	r_0089	0	8.54E-05	-0.00017
26	r_0090	0	4.80E-05	0	r_0090	0	0.000171	0
27	r_0091	0.029945	0.0300867	0.029847	r_0091	0.02369	0.024193	0.023339
28	r_0092	0	0	-4.80E-05	r_0092	0	0	-0.00017
29	r_0093	0	4.80E-05	0	r_0093	0	0.000171	0
30	r_0094	0	0	0	r_0094	0	0	0
31	r_0095	0	2.41E-06	0	r_0095	0	8.59E-06	0
32	r_0096	0.049357	0.0493591	0.049357	r_0096	0.053159	0.053167	0.053158
33	r_0097	0.049357	0.0493591	0.049357	r_0097	0.053159	0.053167	0.053158
34	r_0099	0	0	0	r_0099	0	0	0
35	r_0100	0	1.08E-05	0	r_0100	0	3.84E-05	0
36	r_0101	0	2.34E-06	0	r_0101	0	8.32E-06	0
37	r_0102	0	1.33E-05	0	r_0102	0	4.52E-05	0
38	r_0103	0	1.32E-05	0	r_0103	0	4.68E-05	0
39	r_0104	0.003616	0.0036362	0.003603	r_0104	0.003895	0.003921	0.003848
40	r_0105	0	1.08E-05	0	r_0105	0	3.84E-05	0
41	r_0106	0	1.49E-06	0	r_0106	0	5.31E-06	0
42	r_0107	0	1.49E-06	0	r_0107	0	5.31E-06	0
43	r_0108	0	0	0	r_0108	0	0	0
44	r_0109	0.01403	0.0140539	0.013981	r_0109	0.01511	0.015197	0.015058
45	r_0111	0	3.20E-05	0	r_0111	0	0.000114	0
46	r_0112	0.021043	0.0211073	0.020998	r_0112	0.022664	0.022892	0.022615
47	r_0113	0	4.84E-05	0	r_0113	0	0.000171	0
48	r_0114	0	0	0	r_0114	0	0	0
49	r_0115	0.028629	0.0286578	0.028437	r_0115	0.030834	0.030937	0.03015
50	r_0116	0	0	0	r_0116	0	0	0
51	r_0117	0	0	0	r_0117	0	0	0
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2	r_0118	0.028629	0.0286578	0.028437	r_0118	0.030834	0.030937	0.03015
3	r_0119	0	1.48E-05	0	r_0119	0	5.26E-05	0
4	r_0120	0	1.49E-06	0	r_0120	0	5.31E-06	0
5	r_0121	0	1.49E-06	0	r_0121	0	5.31E-06	0
6	r_0122	0	2.34E-06	0	r_0122	0	8.32E-06	0
7	r_0123	0	1.33E-05	0	r_0123	0	4.52E-05	0
8	r_0124	0	1.08E-05	0	r_0124	0	3.84E-05	0
9	r_0125	0	1.08E-05	0	r_0125	0	3.84E-05	0
10	r_0126	0	2.74E-05	0	r_0126	0	9.77E-05	0
11	r_0127	7.14E-05	9.89E-05	0.00E+00	r_0127	7.69E-05	1.75E-04	0
12	r_0128	0	2.74E-05	0	r_0128	0	9.77E-05	0
13	r_0129	0	2.74E-05	0	r_0129	0	9.77E-05	0
14	r_0130	0	2.74E-05	0	r_0130	0	9.77E-05	0
15	r_0131	0	2.74E-05	0	r_0131	0	9.77E-05	0
16	r_0132	0	8.18E-05	0	r_0132	0	0.000156	0
17	r_0133	0	2.74E-05	0	r_0133	0	9.77E-05	0
18	r_0134	0	2.74E-05	0	r_0134	0	9.77E-05	0
19	r_0135	0	2.74E-05	0	r_0135	0	9.77E-05	0
20	r_0137	0	0	0	r_0137	0	0	0
21	r_0138	0	1.31E-06	0	r_0138	0	4.68E-06	0
22	r_0139	0	1.34E-06	0	r_0139	0	4.77E-06	0
23	r_0140	0	3.31E-05	0	r_0140	0	0.000118	0
24	r_0142	0.001734	0.0017818	0.001701	r_0142	0.001867	0.002038	0.001749
25	r_0143	0	3.31E-05	0	r_0143	0	0.000118	0
26	r_0144	0.001734	0.0017513	0.001722	r_0144	0.001867	0.00193	0.001824
27	r_0145	0	1.34E-06	0	r_0145	0	4.77E-06	0
28	r_0146	0	0	0	r_0146	0	0	0
29	r_0147	0	2.74E-05	0	r_0147	0	9.77E-05	0
30	r_0148	0.513162	0.5132253	0.513119	r_0148	0.471244	0.471469	0.471195
31	r_0149	0	4.84E-05	0	r_0149	0	0.000171	0
32	r_0150	0	3.87E-05	0	r_0150	0	0.000137	0
33	r_0151	0.023833	0.0238353	0.023833	r_0151	0.00938	0.009388	0.00938
34	r_0152	0.025321	0.0253538	0.025321	r_0152	0.010982	0.0111	0.010982
35	r_0153	0.025321	0.0253538	0.025321	r_0153	0.010982	0.0111	0.010982
36	r_0154	0.005041	0.0050534	0.005041	r_0154	0.00543	0.005473	0.00543
37	r_0155	0	0	0	r_0155	0	0	0
38	r_0156	0	6.86E-05	0	r_0156	0	0.000244	0
39	r_0157	0.040365	0.0403653	0.040365	r_0157	0.043474	0.043474	0.043474
40	r_0158	0	1.23E-06	0	r_0158	0	4.38E-06	0
41	r_0159	0	2.74E-05	0	r_0159	0	9.77E-05	0
42	r_0160	0	2.74E-05	0	r_0160	0	9.77E-05	0
43	r_0161	0	2.74E-05	0	r_0161	0	9.77E-05	0
44	r_0162	0	9.57E-07	0	r_0162	0	3.40E-06	0
45	r_0163	0	1000	0	r_0163	0.867614	1000	0
46	r_0164	0	0	0	r_0164	0	0	0
47	r_0165	0	1000	0	r_0165	0.867614	1000	0
48	r_0166	0	1.60E-06	0	r_0166	0	5.70E-06	0
49	r_0167	0	1.60E-06	0	r_0167	0	5.70E-06	0
50	r_0168	0	1.58E-06	0	r_0168	0	5.61E-06	0
51	r_0169	0	1.17E-06	0	r_0169	0	4.15E-06	0

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2	r_0170	0	1.17E-06	0 r_0170	0	4.15E-06	0
3	r_0171	0	1.15E-06	0 r_0171	0	4.10E-06	0
4	r_0172	0	9.33E-07	0 r_0172	0	3.32E-06	0
5	r_0173	0.016002	0.0160477	0.015895 r_0173	0.017235	0.017397	0.016855
6	r_0174	0	3.20E-05	0 r_0174	0	0.000114	0
7	r_0175	0	3.69E-05	0 r_0175	0	0.000131	0
8	r_0176	0	0	0 r_0176	0	0	0
9	r_0177	0	0	0 r_0177	0	0	0
10	r_0178	0	0	0 r_0178	0	0	0
11	r_0179	0	1.71E-06	0 r_0179	0	6.09E-06	0
12	r_0180	0	1.71E-06	0 r_0180	0	6.09E-06	0
13	r_0181	0	1.69E-06	0 r_0181	0	6.00E-06	0
14	r_0182	0	2.20E-06	0 r_0182	0	7.82E-06	0
15	r_0183	0	2.20E-06	0 r_0183	0	7.82E-06	0
16	r_0184	0	2.15E-06	0 r_0184	0	7.66E-06	0
17	r_0185	0	0	0 r_0185	0	0	0
18	r_0186	0	9.37E-07	0 r_0186	0	3.33E-06	0
19	r_0187	0	9.37E-07	0 r_0187	0	3.33E-06	0
20	r_0188	0	0	0 r_0188	0	0	0
21	r_0189	0	0	0 r_0189	0	0	0
22	r_0190	0	0	0 r_0190	0	0	0
23	r_0191	0	7.75E-06	0 r_0191	0	2.76E-05	0
24	r_0192	0	0	0 r_0192	0	0	0
25	r_0193	0	1.75E-05	0 r_0193	0	6.21E-05	0
26	r_0194	0	1.75E-05	0 r_0194	0	6.21E-05	0
27	r_0195	0.002059	0.0020762	0.002059 r_0195	0.002217	0.002279	0.002217
28	r_0198	0	0	0 r_0198	0	0	0
29	r_0199	0	0	0 r_0199	0	0	0
30	r_0200	0	0	0 r_0200	0	0	0
31	r_0201	0	0	0 r_0201	0	0	0
32	r_0202	0.017622	0.0176288	0.017622 r_0202	0.002691	0.002714	0.002691
33	r_0203	0.017622	0.0176234	0.017622 r_0203	0.002691	0.002695	0.002691
34	r_0204	0	4.80E-05	0 r_0204	0	0.000171	0
35	r_0205	0	0	0 r_0205	0	0	0
36	r_0206	0	9.24E-06	0 r_0206	0	3.29E-05	0
37	r_0207	0.014138	0.0141476	0.014138 r_0207	0.015227	0.01526	0.015227
38	r_0208	0.014138	0.0141476	0.014138 r_0208	0.015227	0.01526	0.015227
39	r_0209	0.014138	0.0141384	0.014138 r_0209	0.015227	0.015227	0.015227
40	r_0210	0	0	0 r_0210	0	0	0
41	r_0211	0.008948	0.008965	0.008948 r_0211	0.009637	0.009699	0.009637
42	r_0212	0.008948	0.0089476	0.008948 r_0212	0.009637	0.009637	0.009637
43	r_0213	0	0	0 r_0213	0	0	0
44	r_0214	0.009731	0.0097316	0.009731 r_0214	0.01048	0.010484	0.01048
45	r_0215	0.038254	0.0382755	0.038254 r_0215	0.0412	0.041278	0.0412
46	r_0216	-0.1464	1000	-0.14643 r_0216	-0.1251	1000	-0.12521
47	r_0217	0	1000	0 r_0217	0	1000	0
48	r_0218	0	3.01E-06	-9.97E-06 r_0218	0	1.07E-05	-3.55E-05
49	r_0219	0.038254	0.0382755	0.038254 r_0219	0.0412	0.041278	0.0412
50	r_0220	0.026174	0.0261741	0.026174 r_0220	0.02819	0.02819	0.02819
51	r_0221	0	0	0 r_0221	0	0	0
52							
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2	r_0222	0	4.80E-05	0 r_0222	0	0.000171	0
3	r_0223	0	0	0 r_0223	0	0	0
4	r_0224	0	0	0 r_0224	0	0	0
5	r_0225	0.005833	0.0058348	0.005833 r_0225	0.006282	0.006288	0.006282
6	r_0226	6.071165	6.0712383	6.071088 r_0226	6.146186	6.146448	6.146048
7	r_0227	0	4.80E-05	0 r_0227	0	0.000171	0
8	r_0228	0	0	0 r_0228	0	0	0
9	r_0229	0	0	0 r_0229	0	0	0
10	r_0230	0	0	0 r_0230	0	0	0
11	r_0231	0.0006	0.0006032	0.0006 r_0231	0.000646	0.00065	0.000646
12	r_0233	0	1.23E-05	0 r_0233	0	4.38E-05	0
13	r_0234	0.000595	0.0005982	0.000595 r_0234	0.000641	0.000645	0.000641
14	r_0235	0.000595	0.0005982	0.000595 r_0235	0.000641	0.000645	0.000641
15	r_0236	0.000595	0.0005982	0.000595 r_0236	0.000641	0.000645	0.000641
16	r_0237	0.000595	0.0005982	0.000595 r_0237	0.000641	0.000645	0.000641
17	r_0238	0.000595	0.0005982	0.000595 r_0238	0.000641	0.000645	0.000641
18	r_0239	0.000595	0.0005982	0.000595 r_0239	0.000641	0.000645	0.000641
19	r_0240	0.000595	0.0005982	0.000595 r_0240	0.000641	0.000645	0.000641
20	r_0241	0.000595	0.0005982	0.000595 r_0241	0.000641	0.000645	0.000641
21	r_0242	0	1.23E-05	0 r_0242	0	4.38E-05	0
22	r_0243	8.45E-06	2.08E-05	8.45E-06 r_0243	9.10E-06	5.29E-05	9.10E-06
23	r_0244	0.000564	0.0005674	0.000564 r_0244	0.000608	0.000612	0.000608
24	r_0249	0	0	0 r_0249	0	0	0
25	r_0250	0.023869	0.0238782	0.023869 r_0250	0.025707	0.02574	0.025707
26	r_0252	0	3.69E-05	0 r_0252	0	0.000131	0
27	r_0253	0	1.24E-05	0 r_0253	0	4.34E-05	0
28	r_0254	0	3.69E-05	0 r_0254	0	0.000131	0
29	r_0255	0	4.67E-07	0 r_0255	0	1.66E-06	0
30	r_0256	0	6.64E-06	0 r_0256	0	2.26E-05	0
31	r_0259	0	2.46E-05	0 r_0259	0	4.17E-05	0
32	r_0260	0	2.46E-05	0 r_0260	0	4.17E-05	0
33	r_0261	0	2.46E-05	0 r_0261	0	4.17E-05	0
34	r_0262	0	1.18E-05	0 r_0262	0	3.96E-05	0
35	r_0263	0	2.74E-05	0 r_0263	0	9.77E-05	0
36	r_0264	0	2.74E-05	0 r_0264	0	9.77E-05	0
37	r_0265	0	2.74E-05	0 r_0265	0	9.77E-05	0
38	r_0266	0	2.74E-05	0 r_0266	0	9.77E-05	0
39	r_0267	0	1.23E-05	0 r_0267	0	4.09E-05	0
40	r_0268	0	7.96E-06	0 r_0268	0	2.83E-05	0
41	r_0269	0	8.21E-06	0 r_0269	0	2.92E-05	0
42	r_0270	0	6.02E-06	0 r_0270	0	2.14E-05	0
43	r_0271	0	0	0 r_0271	0	0	0
44	r_0272	8.80E-08	8.80E-08	8.80E-08 r_0272	9.48E-08	9.48E-08	9.48E-08
45	r_0273	0	4.22E-05	0 r_0273	0	0.000114	0
46	r_0274	0	4.22E-05	0 r_0274	0	0.000114	0
47	r_0278	0.020755	0.0207557	0.020754 r_0278	0.022353	0.022357	0.022353
48	r_0279	0.038377	0.0383784	0.038377 r_0279	0.025044	0.025049	0.025044
49	r_0280	0.094939	1000	-1000 r_0280	0.102252	1000	-1000
50	r_0281	0	0	0 r_0281	0	0	0
51	r_0282	0	0	0 r_0282	0	0	0

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2	r_0283	0	0	0	r_0283	0	0	0
3	r_0284	0	0	0	r_0284	0	0	0
4	r_0285	0	0	0	r_0285	0	0	0
5	r_0286	0	0	0	r_0286	0	0	0
6	r_0287	0	0	0	r_0287	0	0	0
7	r_0288	0	0	0	r_0288	0	0	0
8	r_0289	0	0	0	r_0289	0	0	0
9	r_0290	0	0	0	r_0290	0	0	0
10	r_0291	0	0	0	r_0291	0	0	0
11	r_0292	0	0	0	r_0292	0	0	0
12	r_0293	0	0	0	r_0293	0	0	0
13	r_0294	0	0	0	r_0294	0	0	0
14	r_0295	0	0	0	r_0295	0	0	0
15	r_0296	0	0	0	r_0296	0	0	0
16	r_0296	0	0	0	r_0296	0	0	0
17	r_0297	0	0	0	r_0297	0	0	0
18	r_0298	0	0	0	r_0298	0	0	0
19	r_0299	0	0	0	r_0299	0	0	0
20	r_0300	0.089635	0.0897308	0.089621	r_0300	0.096539	0.09688	0.096491
21	r_0301	0	1.33E-05	0	r_0301	0	4.61E-05	0
22	r_0302	0.094939	1000	-1000	r_0302	0.102252	1000	-1000
23	r_0302	0.094939	1000	-1000	r_0302	0.102252	1000	-1000
24	r_0303	-0.0053	1000	-1000	r_0303	-0.00571	1000	-1000
25	r_0304	8.80E-08	8.80E-08	8.80E-08	r_0304	9.48E-08	9.48E-08	9.48E-08
26	r_0306	0	4.80E-05	0	r_0306	0	0.000171	0
27	r_0307	0.00446	0.0044729	0.004362	r_0307	0.004803	0.004848	0.004539
28	r_0308	0	3.31E-05	0	r_0308	0	0.000118	0
29	r_0309	0.000581	0.0006138	0.000533	r_0309	0.000625	0.000743	0.000454
30	r_0310	0.000581	0.0006447	0.000533	r_0310	0.000625	0.000853	0.000454
31	r_0311	0	6.40E-05	0	r_0311	0	0.000228	0
32	r_0312	0	4.80E-05	0	r_0312	0	0.000171	0
33	r_0313	0.000581	0.0005807	0.000581	r_0313	0.000625	0.000625	0.000625
34	r_0314	0	1.28E-05	0	r_0314	0	4.56E-05	0
35	r_0315	0	4.80E-05	0	r_0315	0	0.000171	0
36	r_0317	0.0006	0.0006032	0.0006	r_0317	0.000646	0.00065	0.000646
37	r_0318	0	1.28E-05	0	r_0318	0	4.56E-05	0
38	r_0319	0	0	0	r_0319	0	0	0
39	r_0320	0	0	0	r_0320	0	0	0
40	r_0321	0	0	0	r_0321	0	0	0
41	r_0322	0	0	0	r_0322	0	0	0
42	r_0322	0	0	0	r_0322	0	0	0
43	r_0323	0	0	0	r_0323	0	0	0
44	r_0326	0.000316	0.0003177	0.000218	r_0326	0.00034	0.000345	7.62E-05
45	r_0327	0	4.22E-05	0	r_0327	0	0.000114	0
46	r_0328	0	0	0	r_0328	0	0	0
47	r_0329	0	4.80E-05	0	r_0329	0	0.000171	0
48	r_0330	-0.00021	-0.000163	-0.00021	r_0330	-0.00023	-5.65E-05	-0.00023
49	r_0331	0	0	0	r_0331	0	0	0
50	r_0332	0	0	0	r_0332	0	0	0
51	r_0332	0	0	0	r_0332	0	0	0
52	r_0334	0	0	0	r_0334	0	0	0
53	r_0335	0	0	0	r_0335	0	0	0
54	r_0340	3.79E-05	3.84E-05	1.05E-05	r_0340	4.08E-05	4.25E-05	-5.68E-05
55	r_0341	0	2.46E-05	-2.74E-05	r_0341	0	4.17E-05	-9.77E-05
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2	r_0342	0	1000	0 r_0342	0	1000	0
3	r_0343	0	1000	0 r_0343	0	1000	0
4	r_0344	0.000317	0.0003177	0.000317 r_0344	0.000341	0.000345	0.000341
5	r_0345	0	0	0 r_0345	0	0	0
6	r_0346	0	0	0 r_0346	0	0	0
7	r_0347	0	0	0 r_0347	0	0	0
8	r_0348	0	0	0 r_0348	0	0	0
9	r_0349	-0.00973	-0.009731	-0.00973 r_0349	-0.01048	-0.01048	-0.01048
10	r_0350	0	0	0 r_0350	0	0	0
11	r_0351	0	0	0 r_0351	0	0	0
12	r_0352	0.049357	0.0493591	0.049357 r_0352	0.053159	0.053167	0.053158
13	r_0353	0.016954	0.0169554	0.016954 r_0353	0.01826	0.018265	0.018259
14	r_0354	0	8.73E-05	0 r_0354	0	0.000311	0
15	r_0355	0.001205	0.001212	0.001205 r_0355	0.001298	0.001307	0.001298
16	r_0356	0	0	0 r_0356	0	0	0
17	r_0357	0	4.80E-05	0 r_0357	0	0.000171	0
18	r_0358	0	4.80E-05	0 r_0358	0	0.000171	0
19	r_0359	0	0	0 r_0359	0	0	0
20	r_0360	0	0	0 r_0360	0	0	0
21	r_0361	0.071079	0.0710792	0.071079 r_0361	0.076554	0.076554	0.076553
22	r_0362	0.071079	0.0710792	0.071079 r_0362	0.076554	0.076554	0.076553
23	r_0363	0	1.00E-06	0 r_0363	0	3.56E-06	0
24	r_0364	1.09E-06	9.84E-05	0.00E+00 r_0364	1.17E-06	2.65E-04	0
25	r_0365	0	0	0 r_0365	0	0	0
26	r_0366	0.540524	0.5406194	0.54049 r_0366	0.582157	0.582495	0.582035
27	r_0368	0	0	0 r_0368	0	0	0
28	r_0369	0	2.74E-05	0 r_0369	0	9.77E-05	0
29	r_0370	0	0	0 r_0370	0	0	0
30	r_0373	0	0	0 r_0373	0	0	0
31	r_0399	0	2.74E-05	-6.30E-07 r_0399	0	9.77E-05	-2.24E-06
32	r_0400	0	2.74E-05	-1.75E-05 r_0400	0	9.77E-05	-6.21E-05
33	r_0402	0	2.74E-05	-1.75E-05 r_0402	0	9.77E-05	-6.21E-05
34	r_0410	0	2.74E-05	-7.19E-07 r_0410	0	9.77E-05	-2.56E-06
35	r_0412	0	2.74E-05	-1.75E-05 r_0412	0	9.77E-05	-6.21E-05
36	r_0436	8.80E-08	8.80E-08	8.80E-08 r_0436	9.48E-08	9.48E-08	9.48E-08
37	r_0437	0	0	0 r_0437	0	0	0
38	r_0438	1.909946	1.9099539	1.909927 r_0438	1.936979	1.937008	1.93694
39	r_0439	3.819891	3.8199078	3.819854 r_0439	3.873958	3.874017	3.87388
40	r_0440	0	0	0 r_0440	0	0	0
41	r_0441	2.975965	3.810178	0 r_0441	3.863477	3.863538	0
42	r_0442	0	0.0001067	0 r_0442	0	0.00038	0
43	r_0443	0	0	0 r_0443	0	0	0
44	r_0445	1.142322	1.1423949	1.142138 r_0445	1.166824	1.167079	1.166167
45	r_0446	-1.12634	-1.126153	-1.12641 r_0446	-1.1659	-1.16524	-1.16615
46	r_0447	0	0	-9.61E-05 r_0447	0	0	-0.00034
47	r_0448	0	4.80E-05	0 r_0448	0	0.000171	0
48	r_0449	0	4.80E-05	0 r_0449	0	0.000171	0
49	r_0450	0.608199	0.608249	-4.80E-05 r_0450	0	0.619059	-0.00017
50	r_0451	0	0.0001921	-7.04E-07 r_0451	0	0.000684	-7.58E-07
51	r_0452	0.063292	0.0633605	0.0631 r_0452	0.03559	0.035834	0.034906
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2	r_0453	0.009731	0.0097316	0.009731	r_0453	0.01048	0.010484	0.01048
3	r_0454	0.834195	3.810178	0	r_0454	0	3.863538	0
4	r_0455	0	0	0	r_0455	0	0	0
5	r_0457	0	0	0	r_0457	0	0	0
6	r_0458	0	0	0	r_0458	0	0	0
7	r_0459	0	1000	0	r_0459	0	1000	0
8	r_0460	0	0	0	r_0460	0	0	0
9	r_0461	0	0	0	r_0461	0	0	0
10	r_0462	0.001205	0.001212	0.001205	r_0462	0.001298	0.001307	0.001298
11	r_0463	0	2.74E-05	0	r_0463	0	9.77E-05	0
12	r_0464	0	2.74E-05	0	r_0464	0	9.77E-05	0
13	r_0465	0	4.80E-05	0	r_0465	0	0.000171	0
14	r_0466	0.029945	0.0300867	0.029847	r_0466	0.02369	0.024193	0.023339
15	r_0467	0.720357	0.7204559	0.720216	r_0467	0.70738	0.707733	0.706878
16	r_0468	0	0.0001921	0	r_0468	0	0.000684	0
17	r_0469	0	4.57E-05	0	r_0469	0	0.000163	0
18	r_0470	0	0.0001067	0	r_0470	0	0.00038	0
19	r_0471	1.046435	1.0465235	1.046342	r_0471	1.046427	1.046741	1.046095
20	r_0472	0	8.73E-05	0	r_0472	0	0.000311	0
21	r_0473	0	0.0001921	0	r_0473	0	0.000684	0
22	r_0475	0	4.80E-05	0	r_0475	0	0.000171	0
23	r_0476	0.13268	0.1327674	0.13268	r_0476	0.077745	0.078055	0.077745
24	r_0477	8.80E-08	4.81E-05	8.80E-08	r_0477	9.48E-08	1.71E-04	9.48E-08
25	r_0478	0.009273	0.0092731	0.009273	r_0478	0.009987	0.009987	0.009987
26	r_0479	0.026552	0.0265524	0.026552	r_0479	0.028598	0.028598	0.028597
27	r_0480	0	0	0	r_0480	0	0	0
28	r_0481	0	8.99E-07	0	r_0481	0	3.20E-06	0
29	r_0482	0	0	0	r_0482	0	0	0
30	r_0483	0	8.99E-07	0	r_0483	0	3.20E-06	0
31	r_0484	0	0	0	r_0484	0	0	0
32	r_0485	0	0	0	r_0485	0	0	0
33	r_0486	1.193469	1.1935038	1.193424	r_0486	1.221075	1.221197	1.220912
34	r_0487	0	8.73E-05	0	r_0487	0	0.000311	0
35	r_0488	0	4.80E-05	0	r_0488	0	0.000171	0
36	r_0489	0	8.73E-05	0	r_0489	0	0.000311	0
37	r_0490	0.834195	3.810178	0	r_0490	0	3.863538	0
38	r_0491	0	3.8111079	0	r_0491	0.000908	3.864756	0
39	r_0492	0.835039	3.8111079	0	r_0492	0	3.864756	0
40	r_0497	0	1.13E-05	0	r_0497	0	3.97E-05	0
41	r_0499	0.023833	0.0238353	0.023833	r_0499	0.00938	0.009388	0.00938
42	r_0500	0	0	0	r_0500	0	0	0
43	r_0501	0	0.5685185	0	r_0501	0.580527	0.580654	0
44	r_0502	1.186348	1.18642	1.186163	r_0502	1.197951	1.198206	1.197294
45	r_0503	-0.56848	-0.56839	-0.56852	r_0503	-0.58053	-0.5802	-0.58065
46	r_0504	0	0.5685185	0	r_0504	0	0.580654	0
47	r_0505	7.04E-07	5.69E-01	0.00E+00	r_0505	7.58E-07	5.81E-01	0
48	r_0506	0.568482	0.5685185	0	r_0506	0	0.580654	0
49	r_0507	0.568482	0.5685185	0	r_0507	0	0.580654	0
50	r_0508	0.568482	0.5685185	0	r_0508	0	0.580654	0
51	r_0509	0	0.5685185	0	r_0509	0	0.580654	0
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2	r_0510	0.045618	0.0456817	0.045618	r_0510	0.049131	0.049359	0.049131
3	r_0511	0	6.40E-05	0	r_0511	0	0.000228	0
4	r_0512	0.025549	0.0255494	0.025549	r_0512	0.027517	0.027517	0.027517
5	r_0514	0.004345	0.004356	0.004345	r_0514	0.00468	0.004718	0.00468
6	r_0518	0	0	0	r_0518	0	0	0
7	r_0519	0	0	0	r_0519	0	0	0
8	r_0520	0	0	0	r_0520	0	0	0
9	r_0521	0	0	0	r_0521	0	0	0
10	r_0522	0	0	0	r_0522	0	0	0
11	r_0523	0	0	0	r_0523	0	0	0
12	r_0524	0	0	0	r_0524	0	0	0
13	r_0525	8.71E-05	8.71E-05	8.71E-05	r_0525	9.38E-05	9.38E-05	9.38E-05
14	r_0526	0	1.07E-05	0	r_0526	0	3.80E-05	0
15	r_0527	0	2.74E-05	0	r_0527	0	9.77E-05	0
16	r_0528	0	0.0003463	0	r_0528	0.000321	0.000492	0
17	r_0529	0.000298	0.0003463	0	r_0529	0	0.000492	0
18	r_0530	8.80E-08	8.80E-08	8.80E-08	r_0530	9.48E-08	9.48E-08	9.48E-08
19	r_0531	8.80E-08	8.80E-08	8.80E-08	r_0531	9.48E-08	9.48E-08	9.48E-08
20	r_0532	0	0	0	r_0532	0	0	0
21	r_0533	0	0	0	r_0533	0	0	0
22	r_0534	1	1.0000349	0.999998	r_0534	1	1.000124	0.999993
23	r_0535	0	0	0	r_0535	0	0	0
24	r_0536	0.005833	0.0058348	0.005833	r_0536	0.006282	0.006288	0.006282
25	r_0537	0.005833	0.0058348	0.005833	r_0537	0.006282	0.006288	0.006282
26	r_0538	0.005833	0.0058348	0.005833	r_0538	0.006282	0.006288	0.006282
27	r_0539	0.005833	0.0058331	0.005833	r_0539	0.006282	0.006282	0.006282
28	r_0540	0	0	0	r_0540	0	0	0
29	r_0541	0	0	0	r_0541	0	0	0
30	r_0542	0.02518	0.0251814	0.02518	r_0542	0.027119	0.027125	0.027119
31	r_0543	0	0	0	r_0543	0	0	0
32	r_0544	0	1.75E-05	0	r_0544	0	6.21E-05	0
33	r_0545	0.02518	0.0251814	0.02518	r_0545	0.027119	0.027125	0.027119
34	r_0546	0.038254	0.0382755	0.038147	r_0546	0.0412	0.041278	0.04082
35	r_0547	0	0.0001067	0	r_0547	0	0.00038	0
36	r_0548	0.033213	0.0332605	0.033148	r_0548	0.035771	0.035941	0.035543
37	r_0549	0.005041	0.0051053	0.004993	r_0549	0.00543	0.005657	0.005259
38	r_0550	0	8.99E-07	0	r_0550	0	3.20E-06	0
39	r_0551	0	0	0	r_0551	0	0	0
40	r_0552	0	8.62E-06	0	r_0552	0	3.07E-05	0
41	r_0553	0	1.92E-05	0	r_0553	0	6.84E-05	0
42	r_0554	0	0	0	r_0554	0	0	0
43	r_0555	0	0	0	r_0555	0	0	0
44	r_0556	0	1.75E-05	0	r_0556	0	6.21E-05	0
45	r_0557	8.80E-08	8.80E-08	8.80E-08	r_0557	9.48E-08	9.48E-08	9.48E-08
46	r_0558	0.003616	0.0036362	0.003616	r_0558	0.003895	0.003921	0.003895
47	r_0559	0	1.32E-05	0	r_0559	0	4.68E-05	0
48	r_0560	0.003616	0.0036362	0.003603	r_0560	0.003895	0.003921	0.003848
49	r_0561	0	1.75E-05	0	r_0561	0	6.21E-05	0
50	r_0562	0	2.74E-05	0	r_0562	0	9.77E-05	0
51	r_0563	0.005833	0.0058348	0.005833	r_0563	0.006282	0.006288	0.006282
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2	r_0564	0.005833	0.0058348	0.005833	r_0564	0.006282	0.006288	0.006282
3	r_0565	0.004345	0.0043476	0.004345	r_0565	0.00468	0.004688	0.00468
4	r_0566	0.017622	0.0176288	0.017622	r_0566	0.002691	0.002714	0.002691
5	r_0567	0	9.65E-07	0	r_0567	0	3.44E-06	0
6	r_0568	0	0.0001921	0	r_0568	0	0.000684	0
7	r_0569	0.830825	0.8308881	0.830632	r_0569	0.813375	0.813597	0.812685
8	r_0570	0.029666	0.0296683	0.029666	r_0570	0.015662	0.015671	0.015662
9	r_0571	0	2.40E-05	0	r_0571	0	8.54E-05	0
10	r_0572	0	0	0	r_0572	0	0	0
11	r_0573	0	0	0	r_0573	0	0	0
12	r_0574	0	0	0	r_0574	0	0	0
13	r_0575	0	0	0	r_0575	0	0	0
14	r_0596	0	0	0	r_0596	0	0	0
15	r_0597	0	0	0	r_0597	0	0	0
16	r_0598	0	0	0	r_0598	0	0	0
17	r_0599	0	0	0	r_0599	0	0	0
18	r_0600	0	0	0	r_0600	0	0	0
19	r_0601	0	0	0	r_0601	0	0	0
20	r_0602	0	0	0	r_0602	0	0	0
21	r_0603	0	0	0	r_0603	0	0	0
22	r_0604	0	0	0	r_0604	0	0	0
23	r_0605	0	0	0	r_0605	0	0	0
24	r_0606	0	0	0	r_0606	0	0	0
25	r_0607	0	0	0	r_0607	0	0	0
26	r_0608	0	0	0	r_0608	0	0	0
27	r_0609	0	0	0	r_0609	0	0	0
28	r_0610	0	0	0	r_0610	0	0	0
29	r_0611	0	0	0	r_0611	0	0	0
30	r_0612	0	0	0	r_0612	0	0	0
31	r_0613	0	0	0	r_0613	0	0	0
32	r_0614	0	0	0	r_0614	0	0	0
33	r_0615	0	0	0	r_0615	0	0	0
34	r_0616	0	0	0	r_0616	0	0	0
35	r_0617	0	0	0	r_0617	0	0	0
36	r_0618	0	0	0	r_0618	0	0	0
37	r_0619	0	0	0	r_0619	0	0	0
38	r_0620	0	0	0	r_0620	0	0	0
39	r_0621	0	0	0	r_0621	0	0	0
40	r_0622	0	0	0	r_0622	0	0	0
41	r_0623	0	0	0	r_0623	0	0	0
42	r_0624	0	0	0	r_0624	0	0	0
43	r_0625	0	0	0	r_0625	0	0	0
44	r_0626	0	0	0	r_0626	0	0	0
45	r_0627	0	0	0	r_0627	0	0	0
46	r_0628	0	0	0	r_0628	0	0	0
47	r_0629	0	0	0	r_0629	0	0	0
48	r_0630	0	0	0	r_0630	0	0	0
49	r_0631	0	0	0	r_0631	0	0	0
50	r_0632	0	0	0	r_0632	0	0	0
51	r_0633	0	0	0	r_0633	0	0	0
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2	r_0634	0	0	0 r_0634	0	0	0
3	r_0635	0	0	0 r_0635	0	0	0
4	r_0636	0	0	0 r_0636	0	0	0
5	r_0637	0	0	0 r_0637	0	0	0
6	r_0638	0	0	0 r_0638	0	0	0
7	r_0639	0	0	0 r_0639	0	0	0
8	r_0640	0	0	0 r_0640	0	0	0
9	r_0641	0	0	0 r_0641	0	0	0
10	r_0642	0	0	0 r_0642	0	0	0
11	r_0643	0	0	0 r_0643	0	0	0
12	r_0644	0	0	0 r_0644	0	0	0
13	r_0645	0	0	0 r_0645	0	0	0
14	r_0646	0	6.12E-05	0 r_0646	0	0.000134	0
15	r_0647	0	6.12E-05	0 r_0647	0	0.000134	0
16	r_0648	0	6.12E-05	0 r_0648	3.59E-05	0.000134	0
17	r_0649	0	6.12E-05	0 r_0649	0	0.000134	0
18	r_0650	0	6.12E-05	0 r_0650	0	0.000134	0
19	r_0651	0	6.12E-05	0 r_0651	0	0.000134	0
20	r_0652	0	6.12E-05	0 r_0652	0	0.000134	0
21	r_0653	3.33E-05	6.12E-05	0 r_0653	0	0.000134	0
22	r_0654	0	6.12E-05	0 r_0654	0	0.000134	0
23	r_0655	0	6.12E-05	0 r_0655	0	0.000134	0
24	r_0656	0	2.74E-05	0 r_0656	0	9.77E-05	0
25	r_0657	0	2.74E-05	0 r_0657	0	9.77E-05	0
26	r_0658	0	0.0002401	0 r_0658	0	0.000854	0
27	r_0659	-0.0053	-0.005112	-0.00554 r_0659	-0.00571	-0.00503	-0.00657
28	r_0661	0	3.01E-06	0 r_0661	0	1.07E-05	0
29	r_0662	0	6.86E-05	0 r_0662	0	0.000244	0
30	r_0663	-0.01695	1000	-0.01696 r_0663	-0.01826	1000	-0.01827
31	r_0664	0	0	-1000 r_0664	0	0	-1000
32	r_0665	0.016954	0.0169538	0.016954 r_0665	0.01826	0.01826	0.018259
33	r_0666	0	0	0 r_0666	0	0	0
34	r_0667	0.001205	0.001212	0.001205 r_0667	0.001298	0.001307	0.001298
35	r_0668	0	0	0 r_0668	0	0	0
36	r_0669	0.016954	0.0169554	0.016954 r_0669	0.01826	0.018265	0.018259
37	r_0670	0	6.36E-06	0 r_0670	0	2.26E-05	0
38	r_0671	0.015124	0.0151242	0.015124 r_0671	0	0	0
39	r_0672	0	0	-1000 r_0672	0	0	-1000
40	r_0673	0	1000	0 r_0673	0	1000	0
41	r_0674	0	0	-0.00019 r_0674	0	0	-0.00068
42	r_0675	0	0	0 r_0675	0	0	0
43	r_0676	0	0	0 r_0676	0	0	0
44	r_0678	0.02518	0.0251814	0.02518 r_0678	0.027119	0.027125	0.027119
45	r_0679	0	1.75E-05	0 r_0679	0	6.21E-05	0
46	r_0680	0	1.75E-05	0 r_0680	0	6.21E-05	0
47	r_0681	0	0	0 r_0681	0	0	0
48	r_0682	0	0	0 r_0682	0	0	0
49	r_0683	0	0	0 r_0683	0	0	0
50	r_0687	0	0	0 r_0687	0	0	0
51	r_0688	0	1.63E-05	0 r_0688	0	5.79E-05	0

1							
2	r_0689	0	3.31E-05	0 r_0689	0	0.000118	0
3	r_0690	0	0	0 r_0690	0	0	0
4	r_0691	0	0	0 r_0691	0	0	0
5	r_0692	0.016373	0.0164211	0 r_0692	0.017634	0.017805	0
6	r_0693	0	0.0164211	0 r_0693	0	0.017805	0
7	r_0694	0.015124	0.0151301	0.015124 r_0694	0	2.26E-05	0
8	r_0695	0	1.11E-06	0 r_0695	0	3.96E-06	0
9	r_0696	0	1.63E-05	0 r_0696	0	5.79E-05	0
10	r_0697	0	1.92E-05	0 r_0697	0	6.84E-05	0
11							
12	r_0698	0.000603	0.000606	0.000603 r_0698	0.000649	0.000653	0.000649
13	r_0699	0	1000	-1000 r_0699	0	1000	-1000
14	r_0700	-0.02608	1000	-1000 r_0700	-0.02809	1000	-1000
15	r_0701	0.026077	0.0260773	0.026077 r_0701	0.028086	0.028086	0.028086
16	r_0702	0	0	0 r_0702	0	0	0
17	r_0703	0	0	0 r_0703	0	0	0
18	r_0704	0	0	0 r_0704	0	0	0
19	r_0705	0	0	0 r_0705	0	0	0
20	r_0706	0	0	0 r_0706	0	0	0
21	r_0707	0	0	0 r_0707	0	0	0
22	r_0708	0	0	0 r_0708	0	0	0
23							
24	r_0711	0.02518	0.0251799	0.02518 r_0711	0.027119	0.027119	0.027119
25	r_0712	0	0	0 r_0712	0	0	0
26	r_0713	0.089635	1000	0.089443 r_0713	0.096539	1000	0.095855
27	r_0714	-0.02634	-0.026151	-1000 r_0714	-0.06095	-0.06027	-1000
28	r_0715	0	0	-1.33E-05 r_0715	0	0	-4.52E-05
29	r_0716	0	2.13E-05	0 r_0716	0	7.60E-05	0
30	r_0717	0	9.97E-06	0 r_0717	0	3.55E-05	0
31	r_0718	0	9.61E-05	0 r_0718	0	0.000342	0
32	r_0719	0	0.0001601	0 r_0719	0	0.00057	0
33	r_0721	0	0	0 r_0721	0	0	0
34							
35	r_0722	0.071117	0.0711174	0.071115 r_0722	0.076595	0.076596	0.076588
36	r_0723	-0.07112	-0.071115	-0.07112 r_0723	-0.07659	-0.07659	-0.0766
37	r_0724	0	9.61E-05	0 r_0724	0	0.000342	0
38	r_0725	1.179836	1.1799089	1.179652 r_0725	1.190938	1.191194	1.190281
39	r_0726	0.001734	0.0017513	0.001722 r_0726	0.001867	0.00193	0.001824
40	r_0727	0.006194	0.0061983	0.006182 r_0727	0.006672	0.006682	0.006628
41	r_0728	0	0	0 r_0728	0	0	0
42	r_0729	0.004461	0.0044606	0.004461 r_0729	0.004804	0.004804	0.004804
43	r_0730	0	0	0 r_0730	0	0	0
44	r_0731	0	0.0001067	0 r_0731	0	0.00038	0
45	r_0732	1.179836	1.1799089	1.179652 r_0732	1.190938	1.191194	1.190281
46	r_0733	0	9.61E-05	0 r_0733	0	0.000342	0
47	r_0734	0	0	0 r_0734	0	0	0
48	r_0735	0	6.40E-05	0 r_0735	0	0.000228	0
49							
50	r_0736	0.003616	0.0036361	0.003552 r_0736	0.003895	0.00392	0.003667
51	r_0737	0	6.40E-05	0 r_0737	0	0.000228	0
52	r_0738	0	6.40E-05	0 r_0738	0	0.000228	0
53	r_0739	0.003616	0.0036361	0.003616 r_0739	0.003895	0.00392	0.003895
54	r_0747	3.79E-05	3.84E-05	1.33E-05 r_0747	4.08E-05	4.24E-05	0
55	r_0748	0	2.25E-05	0 r_0748	0	4.03E-05	0
56							
57							
58							
59							
60							

1							
2	r_0749	0	2.46E-05	0 r_0749	0	4.17E-05	0
3	r_0750	0	1.18E-05	0 r_0750	0	3.96E-05	0
4	r_0751	0	2.46E-05	0 r_0751	0	4.17E-05	0
5	r_0752	0	1.18E-05	0 r_0752	0	3.96E-05	0
6	r_0753	0	1.23E-05	0 r_0753	0	4.09E-05	0
7	r_0754	0	7.96E-06	0 r_0754	0	2.83E-05	0
8	r_0755	0	8.21E-06	0 r_0755	0	2.92E-05	0
9	r_0756	0	6.02E-06	0 r_0756	0	2.14E-05	0
10	r_0757	0.000316	0.0003443	0.00028 r_0757	0.000341	0.000439	0.000292
11	r_0758	0.000283	0.0002842	0.00028 r_0758	0.000305	0.000309	0.000292
12	r_0759	0.028629	0.0286578	0.028437 r_0759	0.030834	0.030937	0.03015
13	r_0760	8.80E-08	8.80E-08	8.80E-08 r_0760	9.48E-08	9.48E-08	9.48E-08
14	r_0761	0	0	0 r_0761	0	0	0
15	r_0762	0.015124	0.0151301	0.015124 r_0762	0	2.26E-05	0
16	r_0763	0	5.56E-07	0 r_0763	0	1.98E-06	0
17	r_0764	0	0	0 r_0764	0	0	0
18	r_0765	0	0.0001067	0 r_0765	0	0	0
19	r_0766	0	0	0 r_0766	0	0	0
20	r_0767	0	0	0 r_0767	0	0	0
21	r_0768	0.015124	0.0151242	0.015124 r_0768	0	0	0
22	r_0769	0	0	0 r_0769	0	0	0
23	r_0770	0	3.810178	0 r_0770	0	3.863538	0
24	r_0771	0.015124	0.0151242	0.015017 r_0771	0	0	0
25	r_0772	0	0	0 r_0772	0	0	0
26	r_0773	0	3.810178	0 r_0773	0	3.863538	0
27	r_0774	0	0	0 r_0774	0	0	0
28	r_0775	0	0	0 r_0775	0	0	0
29	r_0781	0	0	0 r_0781	0	0	0
30	r_0782	0	0	0 r_0782	0	0	0
31	r_0783	0	0	0 r_0783	0	0	0
32	r_0784	0	0	0 r_0784	0	0	0
33	r_0785	0.015124	0.0151242	0.015124 r_0785	0	0	0
34	r_0786	0.015124	0.0151242	0.015124 r_0786	0	0	0
35	r_0787	0	0	0 r_0787	0	0	0
36	r_0788	0	4.80E-05	0 r_0788	0	0.000171	0
37	r_0789	0	4.80E-05	0 r_0789	0	0.000171	0
38	r_0790	0	4.80E-05	0 r_0790	0	0.000171	0
39	r_0791	0	0	0 r_0791	0	0	0
40	r_0792	0.003089	0.0031708	0.00305 r_0792	0.003327	0.003534	0.00319
41	r_0793	0	1.96E-05	0 r_0793	0	6.98E-05	0
42	r_0795	0	6.40E-05	0 r_0795	0	0.000228	0
43	r_0796	0.000298	0.0003463	0 r_0796	0	0.000492	0
44	r_0797	0	2.74E-05	0 r_0797	0	9.77E-05	0
45	r_0798	0	4.80E-05	0 r_0798	0	0.000171	0
46	r_0799	0	1.00E-06	0 r_0799	0	3.56E-06	0
47	r_0800	0.096525	0.0965887	0.096523 r_0800	0.087671	0.087898	0.087664
48	r_0801	0	4.80E-05	0 r_0801	0	0.000171	0
49	r_0802	0	0	0 r_0802	0	0	0
50	r_0803	0	2.74E-05	0 r_0803	0	9.77E-05	0
51	r_0804	0	4.80E-05	0 r_0804	0	0.000171	0

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2	r_0805	0	4.80E-05	0	r_0805	0	0.000171	0
3	r_0806	0	7.38E-05	0	r_0806	0	0.000199	0
4	r_0807	0	4.80E-05	0	r_0807	0	0.000171	0
5	r_0810	0	0	0	r_0810	0	0	0
6	r_0811	0.251817	0.2518805	0.251816	r_0811	0.271213	0.271439	0.271211
7	r_0812	0	0	0	r_0812	0	0	0
8	r_0813	0.005041	0.0050414	0.004993	r_0813	0.00543	0.005438	0.005259
9	r_0815	0	0	0	r_0815	0	0	0
10	r_0816	0.014138	0.0141476	0.014138	r_0816	0.015227	0.01526	0.015227
11	r_0817	0	2.11E-06	0	r_0817	0	7.50E-06	0
12	r_0818	0.028629	0.0286578	0.028437	r_0818	0.030834	0.030937	0.03015
13	r_0819	0.01449	0.0145194	0.014298	r_0819	0.015606	0.01571	0.014923
14	r_0820	-0.00973	-0.009731	-0.00973	r_0820	-0.01048	-0.01048	-0.01048
15	r_0821	0.009731	0.0097316	0.009731	r_0821	0.01048	0.010484	0.01048
16	r_0831	7.04E-07	9.68E-05	0.00E+00	r_0831	7.58E-07	3.43E-04	0
17	r_0832	7.04E-07	9.68E-05	0.00E+00	r_0832	7.58E-07	3.43E-04	0
18	r_0841	0	1.48E-05	0	r_0841	0	5.26E-05	0
19	r_0842	0	0	0	r_0842	0	0	0
20	r_0843	0	9.33E-07	0	r_0843	0	3.32E-06	0
21	r_0844	0	2.74E-05	0	r_0844	0	9.77E-05	0
22	r_0845	0	2.74E-05	0	r_0845	0	9.77E-05	0
23	r_0847	0	2.74E-05	0	r_0847	0	9.77E-05	0
24	r_0848	0	2.74E-05	0	r_0848	0	9.77E-05	0
25	r_0849	0	2.74E-05	0	r_0849	0	9.77E-05	0
26	r_0850	0	2.74E-05	0	r_0850	0	9.77E-05	0
27	r_0851	-0.03702	1000	-1000	r_0851	-0.05616	1000	-1000
28	r_0852	0.011781	0.0117805	0.011781	r_0852	0.012688	0.012688	0.012688
29	r_0853	0	0	0	r_0853	0	0	0
30	r_0854	0	1.21E-06	0	r_0854	0	4.30E-06	0
31	r_0855	0.023833	0.0238353	0.023833	r_0855	0.00938	0.009388	0.00938
32	r_0882	8.80E-08	8.80E-08	8.80E-08	r_0882	9.48E-08	9.48E-08	9.48E-08
33	r_0883	0.005041	0.0050534	0.005041	r_0883	0.00543	0.005473	0.00543
34	r_0884	0	4.80E-05	0	r_0884	0	0.000171	0
35	r_0885	0	0	0	r_0885	0	0	0
36	r_0886	0.608199	0.608249	0	r_0886	0	0.619059	0
37	r_0887	0	0.608249	0	r_0887	0.618883	0.619059	0
38	r_0888	0.247356	0.2473832	0.247356	r_0888	0.266408	0.266504	0.266406
39	r_0889	0.029945	0.0300867	0.029847	r_0889	0.02369	0.024193	0.023339
40	r_0890	0	0	0	r_0890	0	0	0
41	r_0891	0.652945	0.6529809	0.652852	r_0891	0.638917	0.639045	0.638588
42	r_0892	1.193469	1.1935038	1.193424	r_0892	1.221075	1.221197	1.220912
43	r_0893	0.540524	0.5406194	0.54049	r_0893	0.582157	0.582495	0.582035
44	r_0902	-0.07112	-0.071115	-0.07112	r_0902	-0.07659	-0.07659	-0.0766
45	r_0903	0	1.75E-05	0	r_0903	0	6.21E-05	0
46	r_0904	0.003616	0.0036361	0.003616	r_0904	0.003895	0.00392	0.003895
47	r_0905	0	0	0	r_0905	0	0	0
48	r_0906	0	0	0	r_0906	0	0	0
49	r_0907	0	2.74E-05	-4.80E-05	r_0907	0	9.77E-05	-0.00017
50	r_0908	0.023833	0.0238353	0.023833	r_0908	0.00938	0.009388	0.00938
51	r_0909	0.005833	0.0058348	0.005833	r_0909	0.006282	0.006288	0.006282
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r_0910	0.005833	0.0058348	0.005833	r_0910	0.006282	0.006288	0.006282
r_0911	0.023833	0.0238353	0.023833	r_0911	0.00938	0.009388	0.00938
r_0912	0.029666	0.0296683	0.029666	r_0912	0.015662	0.015671	0.015662
r_0913	0.017622	0.0176288	0.017622	r_0913	0.002691	0.002714	0.002691
r_0914	0.023833	0.0238353	0.023833	r_0914	0.00938	0.009388	0.00938
r_0915	0.023833	0.0238353	0.023833	r_0915	0.00938	0.009388	0.00938
r_0916	0.072143	0.0721702	0.072143	r_0916	0.028834	0.028931	0.028833
r_0917	0.652945	0.6529809	0.652852	r_0917	0.638917	0.639045	0.638588
r_0918	0.652945	0.6529809	0.652852	r_0918	0.638917	0.639045	0.638588
r_0919	0	1000	0	r_0919	0	1000	0
r_0920	0	1000	0	r_0920	0	1000	0
r_0921	0	0	0	r_0921	0	0	0
r_0922	0	2.46E-05	0	r_0922	0	4.17E-05	0
r_0929	0	0	0	r_0929	0	0	0
r_0935	3.52E-07	3.52E-07	3.52E-07	r_0935	3.79E-07	3.79E-07	3.79E-07
r_0936	0	0	0	r_0936	0	0	0
r_0937	0	9.33E-07	0	r_0937	0	3.32E-06	0
r_0938	0.011781	0.0117817	0.011781	r_0938	0.012688	0.012692	0.012688
r_0939	0.008974	0.0089752	0.008974	r_0939	0.009665	0.009669	0.009665
r_0940	0	2.91E-05	0	r_0940	0	0.000104	0
r_0941	0.01449	0.0144903	0.01449	r_0941	0.015606	0.015606	0.015606
r_0942	4.40E-08	4.40E-08	4.40E-08	r_0942	4.74E-08	4.74E-08	4.74E-08
r_0943	0	0	0	r_0943	0	0	0
r_0949	0	2.74E-05	0	r_0949	0	9.77E-05	0
r_0950	0	0	0	r_0950	0	0	0
r_0951	0	2.74E-05	-1.31E-06	r_0951	0	9.77E-05	-4.68E-06
r_0953	0	0	0	r_0953	0	0	0
r_0954	0	0	0	r_0954	0	0	0
r_0955	0	0	0	r_0955	0	0	0
r_0956	0	0	0	r_0956	0	0	0
r_0957	0.01449	0.0145194	0.01449	r_0957	0.015606	0.01571	0.015606
r_0958	0.172741	0.1729007	0.172719	r_0958	0.186046	0.186614	0.185969
r_0959	0.016002	0.0160477	0.015951	r_0959	0.017235	0.017397	0.017125
r_0960	0	2.41E-06	0	r_0960	0	8.59E-06	0
r_0961	0.151741	0.1518367	0.151694	r_0961	0.163428	0.163769	0.163264
r_0962	0.463771	0.4638657	0.463736	r_0962	0.532069	0.532407	0.531947
r_0963	0	0	0	r_0963	0	0	0
r_0965	0	0	0	r_0965	0	0	0
r_0966	0	0	0	r_0966	0	0	0
r_0967	0.000174	0.0001742	0.000174	r_0967	0.000188	0.000188	0.000188
r_0968	8.71E-05	8.71E-05	8.71E-05	r_0968	9.38E-05	9.38E-05	9.38E-05
r_0969	0	4.80E-05	0	r_0969	0	0.000171	0
r_0970	0	0.0003167	0	r_0970	0	0.000341	0
r_0971	0	4.22E-05	0	r_0971	0	0.000114	0
r_0972	0	4.80E-05	0	r_0972	0	0.000171	0
r_0973	1.09E-06	9.84E-05	0.00E+00	r_0973	1.17E-06	2.65E-04	0
r_0974	3.17E-04	3.17E-04	0.00E+00	r_0974	3.41E-04	3.41E-04	0
r_0975	0	0	0	r_0975	0	0	0
r_0976	0.000527	0.0005289	0.000429	r_0976	0.000567	0.000572	0.000304
r_0977	0	0	0	r_0977	0	0	0

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2	r_0978	0.000211	0.0002112	0.000163	r_0978	0.000227	0.000227	5.65E-05
3	r_0979	0	0	0	r_0979	0	0	0
4	r_0982	0.070811	0.0708583	0.070778	r_0982	0.035404	0.035572	0.035287
5	r_0983	0	0	0	r_0983	0	0	0
6	r_0984	-0.04104	-0.040946	-0.04111	r_0984	-0.0119	-0.01157	-0.01214
7	r_0985	0	0	0	r_0985	0	0	0
8	r_0986	1.85E-05	3.08E-05	1.85E-05	r_0986	1.99E-05	6.37E-05	1.99E-05
9	r_0987	0	0	0	r_0987	0	0	0
10	r_0988	0.02518	0.0251814	0.02518	r_0988	0.027119	0.027125	0.027119
11	r_0989	0.02518	0.0251814	0.02518	r_0989	0.027119	0.027125	0.027119
12	r_0990	0	0.608249	-4.80E-05	r_0990	0.618883	0.619059	-0.00017
13	r_0992	0	4.80E-05	0	r_0992	0	0.000171	0
14	r_0993	3.79E-05	3.84E-05	3.72E-05	r_0993	4.08E-05	4.25E-05	3.95E-05
15	r_0995	0.016312	0.0163115	0.016311	r_0995	0.017568	0.017568	0.017568
16	r_0996	0.038377	0.0383784	0.038377	r_0996	0.025044	0.025049	0.025044
17	r_0997	0.038377	0.0383784	0.038377	r_0997	0.025044	0.025049	0.025044
18	r_0998	0	0	0	r_0998	0	0	0
19	r_0999	0	0	0	r_0999	0	0	0
20	r_1000	2.975965	3.810178	0	r_1000	3.863477	3.863538	0
21	r_1001	0	1.02E-06	0	r_1001	0	3.62E-06	0
22	r_1002	0	9.33E-07	0	r_1002	0	3.32E-06	0
23	r_1003	0	0	0	r_1003	0	0	0
24	r_1004	0	4.80E-05	0	r_1004	0	0.000171	0
25	r_1005	0	4.80E-05	0	r_1005	0	0.000171	0
26	r_1006	0	4.80E-05	0	r_1006	0	0.000171	0
27	r_1007	0	4.80E-05	0	r_1007	0	0.000171	0
28	r_1008	0	0	0	r_1008	0	0	0
29	r_1009	0	0	0	r_1009	0	0	0
30	r_1010	0	0	0	r_1010	0	0	0
31	r_1011	0.000603	0.000606	0.000603	r_1011	0.000649	0.000653	0.000649
32	r_1012	0.000603	0.000606	0.000603	r_1012	0.000649	0.000653	0.000649
33	r_1021	3.819891	3.8199078	0.009726	r_1021	3.873958	3.874017	0.010466
34	r_1022	0	9.61E-05	0	r_1022	0	0.000342	0
35	r_1023	0	4.57E-05	0	r_1023	0	0.000163	0
36	r_1024	0	0	0	r_1024	0	0	0
37	r_1025	0	6.40E-05	0	r_1025	0	0.000228	0
38	r_1026	0.005041	0.0050534	0.004977	r_1026	0.00543	0.005473	0.005202
39	r_1027	0.005041	0.0050414	0.005041	r_1027	0.00543	0.005438	0.00543
40	r_1029	0	0	0	r_1029	0	0	0
41	r_1030	0	4.80E-05	0	r_1030	0	0.000171	0
42	r_1031	0	0	0	r_1031	0	0	0
43	r_1032	0	0	0	r_1032	0	0	0
44	r_1033	0	0	0	r_1033	0	0	0
45	r_1034	0	0	0	r_1034	0	0	0
46	r_1035	0	0	0	r_1035	0	0	0
47	r_1036	0	1.75E-05	0	r_1036	0	6.21E-05	0
48	r_1037	0	0	0	r_1037	0	0	0
49	r_1038	0.006097	0.0061092	0.006097	r_1038	0.006567	0.00661	0.006567
50	r_1039	0	0	0	r_1039	0	0	0
51	r_1040	0	2.18E-05	0	r_1040	0	7.77E-05	0
52								
53								
54								
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1								
2	r_1041	0.033213	0.0332605	0.033148	r_1041	0.035771	0.035941	0.035543
3	r_1042	0.016839	0.0168394	0.016839	r_1042	0.018136	0.018136	0.018136
4	r_1043	0	0	0	r_1043	0	0	0
5	r_1045	0.000317	0.0003177	0.000317	r_1045	0.000341	0.000345	0.000341
6	r_1046	0	0	0	r_1046	0	0	0
7	r_1047	0	0	0	r_1047	0	0	0
8	r_1048	-0.00133	-0.001284	-0.6096	r_1048	-0.61231	0.006739	-0.61255
9	r_1049	-0.00133	-0.001284	-0.00136	r_1049	0.006571	0.006739	0.006454
10	r_1050	-0.03971	-0.039661	-0.03974	r_1050	-0.01847	-0.01831	-0.01859
11	r_1051	0.002059	0.0020762	0.002059	r_1051	0.002217	0.002279	0.002217
12	r_1054	0.607356	0.6073898	0.60731	r_1054	0.617974	0.618094	0.617809
13	r_1055	0.017622	0.0176288	0.017622	r_1055	0.002691	0.002714	0.002691
14	r_1056	0	9.65E-07	0	r_1056	0	3.44E-06	0
15	r_1057	0.002499	0.0024986	0.002499	r_1057	0.002691	0.002691	0.002691
16	r_1058	0	0	0	r_1058	0	0	0
17	r_1058	0	0	0	r_1058	0	0	0
18	r_1063	0.008974	1000	-1000	r_1063	0.009665	1000	-1000
19	r_1065	0	0	0	r_1065	0	0	0
20	r_1066	0.008974	0.008974	0.008974	r_1066	0.009665	0.009665	0.009665
21	r_1067	0	0	0	r_1067	0	0	0
22	r_1068	0	0	0	r_1068	0	0	0
23	r_1068	0	0	0	r_1068	0	0	0
24	r_1069	8.80E-08	8.80E-08	8.80E-08	r_1069	9.48E-08	9.48E-08	9.48E-08
25	r_1070	0	0	0	r_1070	0	0	0
26	r_1071	0	0	-1000	r_1071	0	0	-1000
27	r_1072	0.004461	0.0045086	0.004461	r_1072	0.004804	0.004975	0.004804
28	r_1073	0	0	0	r_1073	0	0	0
29	r_1074	0	2.74E-05	0	r_1074	0	9.77E-05	0
30	r_1075	0	7.75E-06	0	r_1075	0	2.76E-05	0
31	r_1076	0	0	0	r_1076	0	0	0
32	r_1077	0	4.80E-05	0	r_1077	0	0.000171	0
33	r_1078	0	4.80E-05	0	r_1078	0	0.000171	0
34	r_1078	0	4.80E-05	0	r_1078	0	0.000171	0
35	r_1079	0	2.74E-05	0	r_1079	0	9.77E-05	0
36	r_1080	0	2.74E-05	0	r_1080	0	9.77E-05	0
37	r_1081	8.80E-08	8.80E-08	8.80E-08	r_1081	9.48E-08	9.48E-08	9.48E-08
38	r_1082	0	0	0	r_1082	0	0	0
39	r_1083	8.80E-08	8.80E-08	8.80E-08	r_1083	9.48E-08	9.48E-08	9.48E-08
40	r_1084	0.247356	0.2474198	-1000	r_1084	0.266408	0.266634	-1000
41	r_1087	-0.03961	1000	-1000	r_1087	-0.05895	1000	-1000
42	r_1088	0.016328	1000	-1000	r_1088	0.033875	1000	-1000
43	r_1089	0.02328	0.0232796	0.02328	r_1089	0.025073	0.025073	0.025072
44	r_1090	0	0	0	r_1090	0	0	0
45	r_1091	0	1.07E-05	0	r_1091	0	3.80E-05	0
46	r_1092	0	0	0	r_1092	0	0	0
47	r_1093	0	0	0	r_1093	0	0	0
48	r_1093	0	0	0	r_1093	0	0	0
49	r_1094	0	0	0	r_1094	0	0	0
50	r_1095	0	0	0	r_1095	0	0	0
51	r_1619	0	4.80E-05	0	r_1619	0	0.000171	0
52	r_1838	0.02518	0.0251814	0.02518	r_1838	0.027119	0.027125	0.027119
53	r_2029	0	0	0	r_2029	0	0	0
54	r_2112	0	0	0	r_2112	0	0	0
55	r_2113	0	0	0	r_2113	0	0	0
56	r_2113	0	0	0	r_2113	0	0	0
57								
58								
59								
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1								
2	r_2114	0.015124	0.0151242	0.015124	r_2114	0	0	0
3	r_2115	0	1000	0	r_2115	0	1000	0
4	r_2116	0	0.0001067	0	r_2116	0	0.00038	0
5	r_2117	0.025242	1000	-1000	r_2117	0.043474	1000	-1000
6	r_2118	0	9.65E-07	0	r_2118	0	3.44E-06	0
7	r_2119	0	1000	-1000	r_2119	0	1000	-1000
8	r_2126	0	4.80E-05	0	r_2126	0	0.000171	0
9	r_2131	0.094939	0.0949683	0.094747	r_2131	0.102252	0.102355	0.101568
10	r_2140	0.001863	0.001976	0.001774	r_2140	0.002007	0.002132	0.001689
11	r_2141	0.000109	0.0001904	0	r_2141	0.000118	0.000406	0
12	r_2142	0	0	0	r_2142	0	0	0
13	r_2143	0	0	0	r_2143	0	0	0
14	r_2144	0	0	0	r_2144	0	0	0
15	r_2145	0	0	0	r_2145	0	0	0
16	r_2146	0	0	0	r_2146	0	0	0
17	r_2147	0	0	0	r_2147	0	0	0
18	r_2148	0	0	0	r_2148	0	0	0
19	r_2149	0	0	0	r_2149	0	0	0
20	r_2150	0	0	0	r_2150	0	0	0
21	r_2151	0	0	0	r_2151	0	0	0
22	r_2152	0	0	0	r_2152	0	0	0
23	r_2153	0	0	0	r_2153	0	0	0
24	r_2154	0	1.08E-05	0	r_2154	0	3.84E-05	0
25	r_2155	0	1.08E-05	0	r_2155	0	3.84E-05	0
26	r_2156	0	0.0001904	0	r_2156	0	0.000406	0
27	r_2157	3.79E-05	4.46E-05	3.72E-05	r_2157	4.08E-05	6.46E-05	3.95E-05
28	r_2158	3.79E-05	4.20E-05	3.72E-05	r_2158	4.08E-05	5.55E-05	3.95E-05
29	r_2159	3.79E-05	4.09E-05	3.72E-05	r_2159	4.08E-05	5.14E-05	3.95E-05
30	r_2160	0	2.25E-05	0	r_2160	0	4.37E-05	0
31	r_2161	0	1.08E-05	0	r_2161	0	3.84E-05	0
32	r_2162	0	1.08E-05	0	r_2162	0	3.84E-05	0
33	r_2163	0	0.0001904	0	r_2163	0	0.000406	0
34	r_2164	3.79E-05	4.46E-05	3.72E-05	r_2164	4.08E-05	6.46E-05	3.95E-05
35	r_2165	3.79E-05	4.20E-05	3.72E-05	r_2165	4.08E-05	5.55E-05	3.95E-05
36	r_2166	3.79E-05	4.09E-05	3.72E-05	r_2166	4.08E-05	5.14E-05	3.95E-05
37	r_2167	0	2.25E-05	0	r_2167	0	4.37E-05	0
38	r_2168	0	1.08E-05	0	r_2168	0	3.84E-05	0
39	r_2169	0	1.08E-05	0	r_2169	0	3.84E-05	0
40	r_2170	0	0.0001904	0	r_2170	0	0.000406	0
41	r_2171	3.79E-05	4.46E-05	3.72E-05	r_2171	4.08E-05	6.46E-05	3.95E-05
42	r_2172	3.79E-05	4.20E-05	3.72E-05	r_2172	4.08E-05	5.55E-05	3.95E-05
43	r_2173	3.79E-05	4.09E-05	3.72E-05	r_2173	4.08E-05	5.14E-05	3.95E-05
44	r_2174	0	2.25E-05	0	r_2174	0	4.37E-05	0
45	r_2175	0	1.08E-05	0	r_2175	0	3.84E-05	0
46	r_2176	0	1.08E-05	0	r_2176	0	3.84E-05	0
47	r_2177	0	0.0001904	0	r_2177	0	0.000406	0
48	r_2178	3.79E-05	4.46E-05	3.72E-05	r_2178	4.08E-05	6.46E-05	3.95E-05
49	r_2179	3.79E-05	4.20E-05	3.72E-05	r_2179	4.08E-05	5.55E-05	3.95E-05
50	r_2180	3.79E-05	4.09E-05	3.72E-05	r_2180	4.08E-05	5.14E-05	3.95E-05
51	r_2181	0	2.25E-05	0	r_2181	0	4.37E-05	0
52								
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1								
2	r_2182	0.000843	0.0009263	0.000758	r_2182	0.000908	0.001077	0.000605
3	r_2183	7.14E-05	1.52E-04	0.00E+00	r_2183	7.69E-05	3.65E-04	0
4	r_2194	0	1000	-1000	r_2194	0	1000	-1000
5	r_2195	0	1000	-1000	r_2195	0	1000	-1000
6	r_2196	0.00E+00	1000	-1000	r_2196	0	1000	-1000
7	r_2197	0	1000	-1000	r_2197	0	1000	-1000
8	r_2198	0	1000	-1000	r_2198	0	1000	-1000
9	r_2199	0	1000	-1000	r_2199	0	1000	-1000
10	r_2200	0	1000	-1000	r_2200	0	1000	-1000
11	r_2201	0	1000	-1000	r_2201	0	1000	-1000
12	r_2202	-2.95E-05	1000	-1000	r_2202	-3.17E-05	1000	-1000
13	r_2203	0	1000	-1000	r_2203	0	1000	-1000
14	r_2204	0	1000	-1000	r_2204	0	1000	-1000
15	r_2205	0	1000	-1000	r_2205	0	1000	-1000
16	r_2206	0	2.74E-05	-1.75E-05	r_2206	0	9.77E-05	-6.21E-05
17	r_2207	0	2.74E-05	-1.75E-05	r_2207	0	9.77E-05	-6.21E-05
18	r_2208	0	2.74E-05	-1.75E-05	r_2208	0	9.77E-05	-6.21E-05
19	r_2209	0	0	0	r_2209	0	0	0
20	r_2210	0	0	0	r_2210	0	0	0
21	r_2211	0.00E+00	1000	-1000	r_2211	0	1000	-1000
22	r_2212	0.00E+00	1000	-1000	r_2212	0	1000	-1000
23	r_2213	0	0	0	r_2213	0	0	0
24	r_2214	-3.79E-05	1000	-1000	r_2214	-4.08E-05	1000	-1000
25	r_2215	0	1000	-1000	r_2215	0	1000	-1000
26	r_2216	0	0	0	r_2216	0	0	0
27	r_2217	0.00E+00	1.00E+03	-1.00E+03	r_2217	0.00E+00	1.00E+03	-1000
28	r_2218	0.00E+00	1000	-1000	r_2218	0	1000	-1000
29	r_2232	0	9.68E-07	0	r_2232	0	3.45E-06	0
30	r_2233	0	8.13E-07	0	r_2233	0	2.89E-06	0
31	r_2234	0	2.74E-05	0	r_2234	0	9.77E-05	0
32	r_2235	0	2.74E-05	0	r_2235	0	9.77E-05	0
33	r_2236	0	1.49E-06	0	r_2236	0	5.31E-06	0
34	r_2237	0	1.49E-06	0	r_2237	0	5.31E-06	0
35	r_2238	0	1.49E-06	0	r_2238	0	5.31E-06	0
36	r_2239	0	6.67E-06	0	r_2239	0	2.37E-05	0
37	r_2240	0	4.12E-06	0	r_2240	0	1.47E-05	0
38	r_2241	0	2.98E-06	0	r_2241	0	1.06E-05	0
39	r_2242	0	1.43E-06	0	r_2242	0	5.07E-06	0
40	r_2243	0	1.43E-06	0	r_2243	0	5.07E-06	0
41	r_2244	0	1.43E-06	0	r_2244	0	5.07E-06	0
42	r_2245	0	3.01E-06	0	r_2245	0	1.07E-05	0
43	r_2246	0	3.01E-06	0	r_2246	0	1.07E-05	0
44	r_2247	0	3.01E-06	0	r_2247	0	1.07E-05	0
45	r_2248	0	1.49E-06	0	r_2248	0	5.31E-06	0
46	r_2249	0	1.49E-06	0	r_2249	0	5.31E-06	0
47	r_2250	0	1.08E-05	0	r_2250	0	3.84E-05	0
48	r_2251	0	1.33E-05	0	r_2251	0	4.52E-05	0
49	r_2252	0	1.08E-05	0	r_2252	0	3.84E-05	0
50	r_2253	0	2.34E-06	0	r_2253	0	8.32E-06	0
51	r_2254	0	1.49E-06	0	r_2254	0	5.31E-06	0

1						
2	r_2255	0	1.49E-06	0 r_2255	0	5.31E-06
3	r_2256	0	1.49E-06	0 r_2256	0	5.31E-06
4	r_2257	0	6.67E-06	0 r_2257	0	2.37E-05
5	r_2258	0	4.12E-06	0 r_2258	0	1.47E-05
6	r_2259	0	2.98E-06	0 r_2259	0	1.06E-05
7	r_2260	0	1.43E-06	0 r_2260	0	5.07E-06
8	r_2261	0	1.43E-06	0 r_2261	0	5.07E-06
9	r_2262	0	1.43E-06	0 r_2262	0	5.07E-06
10	r_2263	0	3.01E-06	0 r_2263	0	1.07E-05
11	r_2264	0	3.01E-06	0 r_2264	0	1.07E-05
12	r_2265	0	1.26E-06	0 r_2265	0	4.48E-06
13	r_2266	0	1.49E-06	0 r_2266	0	5.31E-06
14	r_2267	0	1.49E-06	0 r_2267	0	5.31E-06
15	r_2268	0	1.33E-05	0 r_2268	0	4.52E-05
16	r_2269	0	1.08E-05	0 r_2269	0	3.84E-05
17	r_2270	0	2.34E-06	0 r_2270	0	8.32E-06
18	r_2271	0	1.49E-06	0 r_2271	0	5.31E-06
19	r_2272	0	1.49E-06	0 r_2272	0	5.31E-06
20	r_2273	0	1.49E-06	0 r_2273	0	5.31E-06
21	r_2274	0	6.67E-06	0 r_2274	0	2.37E-05
22	r_2275	0	4.12E-06	0 r_2275	0	1.47E-05
23	r_2276	0	2.98E-06	0 r_2276	0	1.06E-05
24	r_2277	0	1.43E-06	0 r_2277	0	5.07E-06
25	r_2278	0	1.43E-06	0 r_2278	0	5.07E-06
26	r_2279	0	1.43E-06	0 r_2279	0	5.07E-06
27	r_2280	0	3.01E-06	0 r_2280	0	1.07E-05
28	r_2281	0	3.01E-06	0 r_2281	0	1.07E-05
29	r_2282	0	1.26E-06	0 r_2282	0	4.48E-06
30	r_2283	0	1.49E-06	0 r_2283	0	5.31E-06
31	r_2284	0	1.49E-06	0 r_2284	0	5.31E-06
32	r_2285	0	1.49E-06	0 r_2285	0	5.31E-06
33	r_2286	0	6.67E-06	0 r_2286	0	2.37E-05
34	r_2287	0	4.12E-06	0 r_2287	0	1.47E-05
35	r_2288	0	2.98E-06	0 r_2288	0	1.06E-05
36	r_2289	0	1.43E-06	0 r_2289	0	5.07E-06
37	r_2290	0	1.43E-06	0 r_2290	0	5.07E-06
38	r_2291	0	1.43E-06	0 r_2291	0	5.07E-06
39	r_2292	0	3.01E-06	0 r_2292	0	1.07E-05
40	r_2293	0	3.01E-06	0 r_2293	0	1.07E-05
41	r_2294	0	1.26E-06	0 r_2294	0	4.48E-06
42	r_2295	0	1.43E-06	0 r_2295	0	5.07E-06
43	r_2296	0	1.35E-06	0 r_2296	0	4.79E-06
44	r_2297	0	1.35E-06	0 r_2297	0	4.79E-06
45	r_2298	0	1.26E-06	0 r_2298	0	4.48E-06
46	r_2299	0	3.01E-06	0 r_2299	0	1.07E-05
47	r_2300	0	3.01E-06	0 r_2300	0	1.07E-05
48	r_2301	0	1.35E-06	0 r_2301	0	4.79E-06
49	r_2302	0	3.01E-06	0 r_2302	0	1.07E-05
50	r_2303	0	1.35E-06	0 r_2303	0	4.79E-06
51	r_2304	0	3.01E-06	0 r_2304	0	1.07E-05
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2	r_2305	-0.0053	1000	-1000	r_2305	-0.00571	1000
3	r_2308	0.000843	0.0008551	0.000737	r_2308	0.000908	0.00095
4	r_2309	0	3.20E-05	0	r_2309	0	0.000114
5	r_2310	0	8.11E-05	0	r_2310	0	0.000288
6	r_2311	0	2.30E-05	0	r_2311	0	8.17E-05
7	r_2312	0	0.0001067	0	r_2312	0	0.00038
8	r_2313	0	2.46E-05	0	r_2313	0	8.76E-05
9	r_2314	0	4.61E-05	0	r_2314	0	0.000164
10	r_2315	0	1.89E-05	0	r_2315	0	6.72E-05
11	r_2316	0	8.11E-05	0	r_2316	0	0.000288
12	r_2317	0	2.30E-05	0	r_2317	0	8.17E-05
13	r_2318	0	4.05E-05	0	r_2318	0	0.000144
14	r_2319	0	1.79E-05	0	r_2319	0	6.36E-05
15	r_2320	0	4.61E-05	0	r_2320	0	0.000164
16	r_2321	0	1.89E-05	0	r_2321	0	6.72E-05
17	r_2322	0	2.94E-05	0	r_2322	0	0.000105
18	r_2323	0	1.53E-05	0	r_2323	0	5.45E-05
19	r_2324	0	0.0001067	0	r_2324	0	0.00038
20	r_2325	0	2.46E-05	0	r_2325	0	8.76E-05
21	r_2326	0	4.61E-05	0	r_2326	0	0.000164
22	r_2327	0	1.89E-05	0	r_2327	0	6.72E-05
23	r_2328	0	4.61E-05	0	r_2328	0	0.000164
24	r_2329	0	1.89E-05	0	r_2329	0	6.72E-05
25	r_2330	0	2.94E-05	0	r_2330	0	0.000105
26	r_2331	0	1.53E-05	0	r_2331	0	5.45E-05
27	r_2332	0.000843	0.0008551	0.000758	r_2332	0.000908	0.00095
28	r_2333	0	8.11E-05	0	r_2333	0	0.000288
29	r_2334	0	3.20E-05	0	r_2334	0	0.000114
30	r_2335	0	2.30E-05	0	r_2335	0	8.17E-05
31	r_2336	0	8.11E-05	0	r_2336	0	0.000288
32	r_2337	0	4.05E-05	0	r_2337	0	0.000144
33	r_2338	0	2.30E-05	0	r_2338	0	8.17E-05
34	r_2339	0	1.79E-05	0	r_2339	0	6.36E-05
35	r_2340	0	8.11E-05	0	r_2340	0	0.000288
36	r_2341	0	2.30E-05	0	r_2341	0	8.17E-05
37	r_2342	0	4.05E-05	0	r_2342	0	0.000144
38	r_2343	0	1.79E-05	0	r_2343	0	6.36E-05
39	r_2344	0	0.0001071	0	r_2344	0.00E+00	2.35E-04
40	r_2345	0	8.09E-05	0	r_2345	0	0.000206
41	r_2346	0	7.38E-05	0	r_2346	0	0.000199
42	r_2347	0	7.38E-05	0	r_2347	0	0.000199
43	r_2348	0	8.09E-05	0	r_2348	0	0.000206
44	r_2349	0	7.38E-05	0	r_2349	0	0.000199
45	r_2350	0	7.38E-05	0	r_2350	0	0.000199
46	r_2351	0	7.38E-05	0	r_2351	0	0.000199
47	r_2352	0	0	0	r_2352	0	0
48	r_2353	0	0	0	r_2353	0	0
49	r_2354	0	0	0	r_2354	0	0
50	r_2355	0	0	0	r_2355	0	0
51	r_2356	0	0	0	r_2356	0	0

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2	r_2357	0	0	0	r_2357	0	0
3	r_2358	0	0	0	r_2358	0	0
4	r_2359	0	0	0	r_2359	0	0
5	r_2360	0.00E+00	1.07E-04	0.00E+00	r_2360	0.00E+00	2.35E-04
6	r_2361	0	8.09E-05	0	r_2361	0	0.000206
7	r_2362	0	7.38E-05	0	r_2362	0	0.000199
8	r_2363	0	7.38E-05	0	r_2363	0	0.000199
9	r_2364	0	8.09E-05	0	r_2364	0	0.000206
10	r_2365	0	7.38E-05	0	r_2365	0	0.000199
11	r_2366	0	7.38E-05	0	r_2366	0	0.000199
12	r_2367	0	7.38E-05	0	r_2367	0	0.000199
13	r_2368	0.000109	0.0001366	0	r_2368	0	0.000215
14	r_2369	0	6.17E-05	0	r_2369	0	0.00016
15	r_2370	0	3.20E-05	0	r_2370	0	0.000114
16	r_2371	0	2.74E-05	0	r_2371	0	9.77E-05
17	r_2372	0	6.17E-05	0	r_2372	0	0.00016
18	r_2373	0	3.08E-05	0	r_2373	0	0.00011
19	r_2374	0	2.74E-05	0	r_2374	0	9.77E-05
20	r_2375	0	2.74E-05	0	r_2375	0	9.77E-05
21	r_2376	0	3.20E-05	0	r_2376	0	0.000114
22	r_2377	0	3.20E-05	0	r_2377	0	0.000114
23	r_2378	0	3.20E-05	0	r_2378	0	0.000114
24	r_2379	0	3.20E-05	0	r_2379	0	0.000114
25	r_2380	0	3.20E-05	0	r_2380	0	0.000114
26	r_2381	0	3.20E-05	0	r_2381	0	0.000114
27	r_2382	0	3.20E-05	0	r_2382	0	0.000114
28	r_2383	0	3.20E-05	0	r_2383	0	0.000114
29	r_2384	0	6.17E-05	0	r_2384	0	0.00016
30	r_2385	0	3.08E-05	0	r_2385	0	0.00011
31	r_2386	0	2.74E-05	0	r_2386	0	9.77E-05
32	r_2387	0	2.74E-05	0	r_2387	0	9.77E-05
33	r_2388	0	3.08E-05	0	r_2388	0	0.00011
34	r_2389	0	2.74E-05	0	r_2389	0	9.77E-05
35	r_2390	0	2.74E-05	0	r_2390	0	9.77E-05
36	r_2391	0	2.74E-05	0	r_2391	0	9.77E-05
37	r_2392	0	2.74E-05	0	r_2392	0	9.77E-05
38	r_2393	0	2.74E-05	0	r_2393	0	9.77E-05
39	r_2394	0	2.74E-05	0	r_2394	0	9.77E-05
40	r_2395	0	2.74E-05	0	r_2395	0	9.77E-05
41	r_2396	0	2.74E-05	0	r_2396	0	9.77E-05
42	r_2397	0	2.74E-05	0	r_2397	0	9.77E-05
43	r_2398	0	2.74E-05	0	r_2398	0	9.77E-05
44	r_2399	0	2.74E-05	0	r_2399	0	9.77E-05
45	r_2400	0	0.0001366	0	r_2400	0.000118	0.000215
46	r_2401	0	6.17E-05	0	r_2401	0	0.00016
47	r_2402	0	3.20E-05	0	r_2402	0	0.000114
48	r_2403	0	2.74E-05	0	r_2403	0	9.77E-05
49	r_2404	0	6.17E-05	0	r_2404	0	0.00016
50	r_2405	0	3.08E-05	0	r_2405	0	0.00011
51	r_2406	0	2.74E-05	0	r_2406	0	9.77E-05
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2	r_2407	0	2.74E-05	0	r_2407	0	9.77E-05
3	r_2408	0	3.20E-05	0	r_2408	0	0.000114
4	r_2409	0	3.20E-05	0	r_2409	0	0.000114
5	r_2410	0	3.20E-05	0	r_2410	0	0.000114
6	r_2411	0	3.20E-05	0	r_2411	0	0.000114
7	r_2412	0	3.20E-05	0	r_2412	0	0.000114
8	r_2413	0	3.20E-05	0	r_2413	0	0.000114
9	r_2414	0	3.20E-05	0	r_2414	0	0.000114
10	r_2415	0	3.20E-05	0	r_2415	0	0.000114
11	r_2416	0	6.17E-05	0	r_2416	0	0.00016
12	r_2417	0	3.08E-05	0	r_2417	0	0.00011
13	r_2418	0	2.74E-05	0	r_2418	0	9.77E-05
14	r_2419	0	2.74E-05	0	r_2419	0	9.77E-05
15	r_2420	0	3.08E-05	0	r_2420	0	0.00011
16	r_2421	0	2.74E-05	0	r_2421	0	9.77E-05
17	r_2422	0	2.74E-05	0	r_2422	0	9.77E-05
18	r_2423	0	2.74E-05	0	r_2423	0	9.77E-05
19	r_2424	0	2.74E-05	0	r_2424	0	9.77E-05
20	r_2425	0	2.74E-05	0	r_2425	0	9.77E-05
21	r_2426	0	2.74E-05	0	r_2426	0	9.77E-05
22	r_2427	0	2.74E-05	0	r_2427	0	9.77E-05
23	r_2428	0	2.74E-05	0	r_2428	0	9.77E-05
24	r_2429	0	2.74E-05	0	r_2429	0	9.77E-05
25	r_2430	0	2.74E-05	0	r_2430	0	9.77E-05
26	r_2431	0	2.74E-05	0	r_2431	0	9.77E-05
27	r_2432	0.000843	0.0008712	0.000704	r_2432	0.000908	0.001006
28	r_2433	0	7.38E-05	0	r_2433	0	0.00016
29	r_2434	0	0.0001028	0	r_2434	0	0.000318
30	r_2435	0	7.38E-05	0	r_2435	0	0.000149
31	r_2436	0	0.0001028	0	r_2436	0	0.000318
32	r_2437	0	7.38E-05	0	r_2437	0	0.000149
33	r_2438	0	7.38E-05	0	r_2438	0	0.000187
34	r_2439	0	7.38E-05	0	r_2439	0	0.000149
35	r_2440	0	5.36E-05	0	r_2440	0	0.000117
36	r_2441	0	3.69E-05	0	r_2441	0	9.93E-05
37	r_2442	0	4.05E-05	0	r_2442	0	0.000103
38	r_2443	0	3.69E-05	0	r_2443	0	9.93E-05
39	r_2444	0	4.05E-05	0	r_2444	0	0.000103
40	r_2445	0	3.69E-05	0	r_2445	0	9.93E-05
41	r_2446	0.000527	0.0005278	0.000442	r_2446	0.000567	0.000571
42	r_2447	0	4.35E-05	0	r_2447	0	0.000126
43	r_2448	0	8.11E-05	0	r_2448	0	0.000288
44	r_2449	0	4.22E-05	0	r_2449	0	0.000114
45	r_2450	0	8.11E-05	0	r_2450	0	0.000288
46	r_2451	0	4.22E-05	0	r_2451	0	0.000114
47	r_2452	0	4.61E-05	0	r_2452	0	0.000152
48	r_2453	0	4.22E-05	0	r_2453	0	0.000114
49	r_2454	0.000316	0.0003443	0.000202	r_2454	0.000341	0.000439
50	r_2455	0	7.38E-05	0	r_2455	0	0.00016
51	r_2456	0	8.13E-05	0	r_2456	0	0.000169
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2	r_2457	0	7.38E-05	0	r_2457	0	0.000149
3	r_2458	0	8.13E-05	0	r_2458	0	0.000169
4	r_2459	0	7.38E-05	0	r_2459	0	0.000149
5	r_2460	0	7.38E-05	0	r_2460	0	0.000149
6	r_2461	0	7.38E-05	0	r_2461	0	0.000149
7	r_2462	0	0	0	r_2462	0	0
8	r_2463	0	0	0	r_2463	0	0
9	r_2464	0.000475	0.0004754	0.000282	r_2464	0.000511	0.000514
10	r_2465	0	4.35E-05	0	r_2465	0	0.000126
11	r_2466	0	8.11E-05	0	r_2466	0	0.000288
12	r_2467	0	4.22E-05	0	r_2467	0	0.000114
13	r_2468	0	8.11E-05	0	r_2468	0	0.000288
14	r_2469	0	4.22E-05	0	r_2469	0	0.000114
15	r_2470	0	4.61E-05	0	r_2470	0	0.000152
16	r_2471	0	4.22E-05	0	r_2471	0	0.000114
17	r_2472	0	0.0001921	0	r_2472	0	0.000512
18	r_2473	0	3.73E-05	0	r_2473	0	0.000108
19	r_2474	0	5.70E-05	0	r_2474	0	0.000203
20	r_2475	0	3.69E-05	0	r_2475	0	9.93E-05
21	r_2476	0	5.70E-05	0	r_2476	0	0.000203
22	r_2477	0	3.69E-05	0	r_2477	0	9.93E-05
23	r_2478	0	3.79E-05	0	r_2478	0	0.000125
24	r_2479	0	3.69E-05	0	r_2479	0	9.93E-05
25	r_2480	0	0.0001921	0	r_2480	0	0.000512
26	r_2481	0	3.73E-05	0	r_2481	0	0.000108
27	r_2482	0	5.70E-05	0	r_2482	0	0.000203
28	r_2483	0	3.69E-05	0	r_2483	0	9.93E-05
29	r_2484	0	5.70E-05	0	r_2484	0	0.000203
30	r_2485	0	3.69E-05	0	r_2485	0	9.93E-05
31	r_2486	0	3.79E-05	0	r_2486	0	0.000125
32	r_2487	0	3.69E-05	0	r_2487	0	9.93E-05
33	r_2488	0	0.0003809	0	r_2488	0.000409	0.000412
34	r_2489	0	4.35E-05	0	r_2489	0	0.000126
35	r_2490	0	8.11E-05	0	r_2490	0	0.000288
36	r_2491	0	4.22E-05	0	r_2491	0	0.000114
37	r_2492	0.00038	0.0003809	0	r_2492	0	0.000412
38	r_2493	0	4.35E-05	0	r_2493	0	0.000126
39	r_2494	0	8.11E-05	0	r_2494	0	0.000288
40	r_2495	0	4.22E-05	0	r_2495	0	0.000114
41	r_2496	0	0.0003809	0	r_2496	0.000409	0.000412
42	r_2497	0	4.35E-05	0	r_2497	0	0.000126
43	r_2498	0	8.11E-05	0	r_2498	0	0.000288
44	r_2499	0	4.22E-05	0	r_2499	0	0.000114
45	r_2500	0.00038	0.0003809	0	r_2500	0	0.000412
46	r_2501	0	4.35E-05	0	r_2501	0	0.000126
47	r_2502	0	8.11E-05	0	r_2502	0	0.000288
48	r_2503	0	4.22E-05	0	r_2503	0	0.000114
49	r_2504	0	0.0003809	0	r_2504	0.000409	0.000412
50	r_2505	0	4.35E-05	0	r_2505	0	0.000126
51	r_2506	0	8.11E-05	0	r_2506	0	0.000288
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2	r_2507	0	4.22E-05	0 r_2507	0 0.000114	0
3	r_2508	0.00038	0.0003809	0 r_2508	0 0.000412	0
4	r_2509	0	4.35E-05	0 r_2509	0 0.000126	0
5	r_2510	0	8.11E-05	0 r_2510	0 0.000288	0
6	r_2511	0	4.22E-05	0 r_2511	0 0.000114	0
7	r_2512	0	7.38E-05	0 r_2512	0 0.000199	0
8	r_2513	0	7.38E-05	0 r_2513	0 0.000199	0
9	r_2514	0	7.38E-05	0 r_2514	0 0.000199	0
10	r_2515	0	7.38E-05	0 r_2515	0 0.000199	0
11	r_2516	0	7.38E-05	0 r_2516	0 0.000199	0
12	r_2517	0	7.38E-05	0 r_2517	0 0.000199	0
13	r_2518	0	7.38E-05	0 r_2518	0 0.000199	0
14	r_2519	0	7.38E-05	0 r_2519	0 0.000199	0
15	r_2520	0	0	0 r_2520	0 0	0
16	r_2521	0	0	0 r_2521	0 0	0
17	r_2522	0	0	0 r_2522	0 0	0
18	r_2523	0	0	0 r_2523	0 0	0
19	r_2524	0	0	0 r_2524	0 0	0
20	r_2525	0	0	0 r_2525	0 0	0
21	r_2526	0	0	0 r_2526	0 0	0
22	r_2527	0	0	0 r_2527	0 0	0
23	r_2528	0	4.22E-05	0 r_2528	0 0.000114	0
24	r_2529	0	4.22E-05	0 r_2529	0 0.000114	0
25	r_2530	0	4.22E-05	0 r_2530	0 0.000114	0
26	r_2531	0	4.22E-05	0 r_2531	0 0.000114	0
27	r_2532	0	4.22E-05	0 r_2532	0 0.000114	0
28	r_2533	0	4.22E-05	0 r_2533	0 0.000114	0
29	r_2534	0	4.22E-05	0 r_2534	0 0.000114	0
30	r_2535	0	4.22E-05	0 r_2535	0 0.000114	0
31	r_2536	0	5.36E-05	0 r_2536	0 0.000117	0
32	r_2537	0	3.69E-05	0 r_2537	0 9.93E-05	0
33	r_2538	0	4.05E-05	0 r_2538	0 0.000103	0
34	r_2539	0	3.69E-05	0 r_2539	0 9.93E-05	0
35	r_2540	0	4.05E-05	0 r_2540	0 0.000103	0
36	r_2541	0	3.69E-05	0 r_2541	0 9.93E-05	0
37	r_2542	0	5.36E-05	0 r_2542	0 0.000117	0
38	r_2543	0	3.69E-05	0 r_2543	0 9.93E-05	0
39	r_2544	0	4.05E-05	0 r_2544	0 0.000103	0
40	r_2545	0	3.69E-05	0 r_2545	0 9.93E-05	0
41	r_2546	0	4.05E-05	0 r_2546	0 0.000103	0
42	r_2547	0	3.69E-05	0 r_2547	0 9.93E-05	0
43	r_2548	0	0	0 r_2548	0 0	0
44	r_2549	0	0	0 r_2549	0 0	0
45	r_2550	0	0	0 r_2550	0 0	0
46	r_2551	0	0	0 r_2551	0 0	0
47	r_2552	0	0	0 r_2552	0 0	0
48	r_2553	0	0	0 r_2553	0 0	0
49	r_2554	0	0	0 r_2554	0 0	0
50	r_2555	0	0	0 r_2555	0 0	0
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3	r_2558	0	0	0 r_2558	0	0	0	
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9	r_2564	0	0	0 r_2564	0	0	0	
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17	r_2572	0	0	0 r_2572	0	0	0	
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19	r_2574	0	0	0 r_2574	0	0	0	
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22	r_2577	0	0	0 r_2577	0	0	0	
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24	r_2579	0	0	0 r_2579	0	0	0	
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27	r_2582	0	0	0 r_2582	0	0	0	
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31	r_2586	0	0	0 r_2586	0	0	0	
32	r_2587	0	0	0 r_2587	0	0	0	
33	r_2588	0	0	0 r_2588	0	0	0	
34	r_2589	0	0	0 r_2589	0	0	0	
35	r_2590	0	0	0 r_2590	0	0	0	
36	r_2591	0	0	0 r_2591	0	0	0	
37	r_2592	0	0	0 r_2592	0	0	0	
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46	r_2601	0	0	0 r_2601	0	0	0	
47	r_2602	0	0	0 r_2602	0	0	0	
48	r_2603	0	0	0 r_2603	0	0	0	
49	r_2604	0	0	0 r_2604	0	0	0	
50	r_2605	0	0	0 r_2605	0	0	0	
51	r_2606	0	0	0 r_2606	0	0	0	
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4	r_2609	0	0	0 r_2609	0	0	0
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7	r_2612	0	0	0 r_2612	0	0	0
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9	r_2614	0	0	0 r_2614	0	0	0
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13	r_2618	0	0	0 r_2618	0	0	0
14	r_2619	0	0	0 r_2619	0	0	0
15	r_2620	0	1000	-1000 r_2620	0	1000	-1000
16	r_2621	0	1000	-1000 r_2621	0	1000	-1000
17	r_2622	0	1000	-1000 r_2622	0	1000	-1000
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34	r_2639	0	1000	-1000 r_2639	0	1000	-1000
35	r_2640	0	1000	-1000 r_2640	0	1000	-1000
36	r_2641	0	1000	-1000 r_2641	0	1000	-1000
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43	r_2648	0	1000	-1000 r_2648	0	1000	-1000
44	r_2649	0	1000	-1000 r_2649	0	1000	-1000
45	r_2650	0	1000	-1000 r_2650	0	1000	-1000
46	r_2651	0	1000	-1000 r_2651	0	1000	-1000
47	r_2652	0	1000	-1000 r_2652	0	1000	-1000
48	r_2653	0	1000	-1000 r_2653	0	1000	-1000
49	r_2654	0	1000	-1000 r_2654	0	1000	-1000
50	r_2655	0	1000	-1000 r_2655	0	1000	-1000
51	r_2656	0	1000	-1000 r_2656	0	1000	-1000

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2	r_2657	0	1000	-1000	r_2657	0	1000	-1000
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15	r_2670	0	1000	-1000	r_2670	0	1000	-1000
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17	r_2672	0	1000	-1000	r_2672	0	1000	-1000
18	r_2673	0	1000	-1000	r_2673	0	1000	-1000
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32	r_2687	0	1000	-1000	r_2687	0	1000	-1000
33	r_2688	0	1000	-1000	r_2688	0	1000	-1000
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51	r_2706	0	1000	-1000	r_2706	0	1000	-1000
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4	r_2709	0	1000	-1000	r_2709	0	1000	-1000
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6	r_2711	0	1000	-1000	r_2711	0	1000	-1000
7	r_2712	0	1000	-1000	r_2712	0	1000	-1000
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9	r_2714	0	1000	-1000	r_2714	0	1000	-1000
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12	r_2717	0	1000	-1000	r_2717	0	1000	-1000
13	r_2718	0	1000	-1000	r_2718	0	1000	-1000
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25	r_2730	0	1000	-1000	r_2730	0	1000	-1000
26	r_2731	0	1000	-1000	r_2731	0	1000	-1000
27	r_2732	0	1000	-1000	r_2732	0	1000	-1000
28	r_2733	0	1000	-1000	r_2733	0	1000	-1000
29	r_2734	0	1000	-1000	r_2734	0	1000	-1000
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36	r_2741	0	1000	-1000	r_2741	0	1000	-1000
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51	r_2756	0	1000	-1000	r_2756	0	1000	-1000
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25	r_2780	0	1000	-1000	r_2780	0	1000	-1000
26	r_2781	0	1000	-1000	r_2781	0	1000	-1000
27	r_2782	0	1000	-1000	r_2782	0	1000	-1000
28	r_2783	0	1000	-1000	r_2783	0	1000	-1000
29	r_2784	0	1000	-1000	r_2784	0	1000	-1000
30	r_2785	0	1000	-1000	r_2785	0	1000	-1000
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35	r_2790	0	1000	-1000	r_2790	0	1000	-1000
36	r_2791	0	1000	-1000	r_2791	0	1000	-1000
37	r_2792	0	1000	-1000	r_2792	0	1000	-1000
38	r_2793	0	1000	-1000	r_2793	0	1000	-1000
39	r_2794	0	1000	-1000	r_2794	0	1000	-1000
40	r_2795	0	1000	-1000	r_2795	0	1000	-1000
41	r_2796	0	1000	-1000	r_2796	0	1000	-1000
42	r_2797	0	1000	-1000	r_2797	0	1000	-1000
43	r_2798	0	1000	-1000	r_2798	0	1000	-1000
44	r_2799	0	1000	-1000	r_2799	0	1000	-1000
45	r_2800	0	1000	-1000	r_2800	0	1000	-1000
46	r_2801	0	1000	-1000	r_2801	0	1000	-1000
47	r_2802	0	1000	-1000	r_2802	0	1000	-1000
48	r_2803	0	1000	-1000	r_2803	0	1000	-1000
49	r_2804	0	1000	-1000	r_2804	0	1000	-1000
50	r_2805	0	1000	-1000	r_2805	0	1000	-1000
51	r_2806	0	1000	-1000	r_2806	0	1000	-1000
52								
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4	r_2809	0	1000	-1000	r_2809	0	1000
5	r_2810	0	1000	-1000	r_2810	0	1000
6	r_2811	0	1000	-1000	r_2811	0	1000
7	r_2820	0	4.80E-05	0	r_2820	0	0.000171
8	r_2821	0	4.80E-05	0	r_2821	0	0.000171
9	r_2822	0	4.80E-05	0	r_2822	0	0.000171
10	r_2823	0	4.80E-05	0	r_2823	0	0.000171
11	r_2824	0	4.80E-05	0	r_2824	0	0.000171
12	r_2825	0	4.80E-05	0	r_2825	0	0.000171
13	r_2826	0	4.80E-05	0	r_2826	0	0.000171
14	r_2827	0	4.80E-05	0	r_2827	0	0.000171
15	r_2828	0	0	0	r_2828	0	0
16	r_2829	0	0	0	r_2829	0	0
17	r_2830	0	0	0	r_2830	0	0
18	r_2831	0	0	0	r_2831	0	0
19	r_2832	0	0	0	r_2832	0	0
20	r_2833	0	0	0	r_2833	0	0
21	r_2834	0	0	0	r_2834	0	0
22	r_2835	0	0	0	r_2835	0	0
23	r_2836	0	4.80E-05	0	r_2836	0	0.000171
24	r_2837	0	4.80E-05	0	r_2837	0	0.000171
25	r_2838	0	4.80E-05	0	r_2838	0	0.000171
26	r_2839	0	4.80E-05	0	r_2839	0	0.000171
27	r_2840	0	4.80E-05	0	r_2840	0	0.000171
28	r_2841	0	4.80E-05	0	r_2841	0	0.000171
29	r_2842	0	4.80E-05	0	r_2842	0	0.000171
30	r_2843	0	4.80E-05	0	r_2843	0	0.000171
31	r_2844	0	2.40E-05	0	r_2844	0	8.54E-05
32	r_2845	0	2.40E-05	0	r_2845	0	8.54E-05
33	r_2846	0	2.40E-05	0	r_2846	0	8.54E-05
34	r_2847	0	2.40E-05	0	r_2847	0	8.54E-05
35	r_2848	0	2.40E-05	0	r_2848	0	8.54E-05
36	r_2849	0	2.40E-05	0	r_2849	0	8.54E-05
37	r_2850	0	2.40E-05	0	r_2850	0	8.54E-05
38	r_2851	0	2.40E-05	0	r_2851	0	8.54E-05
39	r_2852	0	4.80E-05	0	r_2852	0	0.000171
40	r_2853	0	4.80E-05	0	r_2853	0	0.000171
41	r_2854	0	4.80E-05	0	r_2854	0	0.000171
42	r_2855	0	4.80E-05	0	r_2855	0	0.000171
43	r_2856	0	4.80E-05	0	r_2856	0	0.000171
44	r_2857	0	4.80E-05	0	r_2857	0	0.000171
45	r_2858	0	4.80E-05	0	r_2858	0	0.000171
46	r_2859	0	4.80E-05	0	r_2859	0	0.000171
47	r_2860	0	2.40E-05	0	r_2860	0	8.54E-05
48	r_2861	0	2.40E-05	0	r_2861	0	8.54E-05
49	r_2862	0	2.40E-05	0	r_2862	0	8.54E-05
50	r_2863	0	2.40E-05	0	r_2863	0	8.54E-05
51	r_2864	0	2.40E-05	0	r_2864	0	8.54E-05

1							
2	r_2865	0	2.40E-05	0 r_2865	0	8.54E-05	0
3	r_2866	0	2.40E-05	0 r_2866	0	8.54E-05	0
4	r_2867	0	2.40E-05	0 r_2867	0	8.54E-05	0
5	r_2868	0	4.80E-05	0 r_2868	0	0.000171	0
6	r_2869	0	4.80E-05	0 r_2869	0	0.000171	0
7	r_2870	0	4.80E-05	0 r_2870	0	0.000171	0
8	r_2871	0	4.80E-05	0 r_2871	0	0.000171	0
9	r_2872	0	4.80E-05	0 r_2872	0	0.000171	0
10	r_2873	0	4.80E-05	0 r_2873	0	0.000171	0
11	r_2874	0	4.80E-05	0 r_2874	0	0.000171	0
12	r_2875	0	4.80E-05	0 r_2875	0	0.000171	0
13	r_2876	0	4.80E-05	0 r_2876	0	0.000171	0
14	r_2877	0	4.80E-05	0 r_2877	0	0.000171	0
15	r_2878	0	4.80E-05	0 r_2878	0	0.000171	0
16	r_2879	0	4.80E-05	0 r_2879	0	0.000171	0
17	r_2880	0	4.80E-05	0 r_2880	0	0.000171	0
18	r_2881	0	4.80E-05	0 r_2881	0	0.000171	0
19	r_2882	0	4.80E-05	0 r_2882	0	0.000171	0
20	r_2883	0	4.80E-05	0 r_2883	0	0.000171	0
21	r_2884	0.00038	1000	-1000 r_2884	0	1000	-1000
22	r_2885	0	1000	-1000 r_2885	0	1000	-1000
23	r_2886	0	1000	-1000 r_2886	0	1000	-1000
24	r_2887	0	1000	-1000 r_2887	0	1000	-1000
25	r_2888	-0.00038	1000	-1000 r_2888	0	1000	-1000
26	r_2889	0	1000	-1000 r_2889	0	1000	-1000
27	r_2890	0	1000	-1000 r_2890	0	1000	-1000
28	r_2891	0	1000	-1000 r_2891	0	1000	-1000
29	r_2892	0	1000	-1000 r_2892	0	1000	-1000
30	r_2893	0	1000	-1000 r_2893	0	1000	-1000
31	r_2894	0	1000	-1000 r_2894	0	1000	-1000
32	r_2895	0	1000	-1000 r_2895	0	1000	-1000
33	r_2896	0	1000	-1000 r_2896	0	1000	-1000
34	r_2897	0	1000	-1000 r_2897	0	1000	-1000
35	r_2898	0	1000	-1000 r_2898	0	1000	-1000
36	r_2899	0	1000	-1000 r_2899	0	1000	-1000
37	r_2900	0	1000	-1000 r_2900	0	1000	-1000
38	r_2901	0	1000	-1000 r_2901	0	1000	-1000
39	r_2902	0	1000	-1000 r_2902	0	1000	-1000
40	r_2903	0	1000	-1000 r_2903	0	1000	-1000
41	r_2904	0	1000	-1000 r_2904	0	1000	-1000
42	r_2905	0	1000	-1000 r_2905	0	1000	-1000
43	r_2906	0	1000	-1000 r_2906	0	1000	-1000
44	r_2907	0	1000	-1000 r_2907	0	1000	-1000
45	r_2908	0	1000	-1000 r_2908	0	1000	-1000
46	r_2909	0	1000	-1000 r_2909	0	1000	-1000
47	r_2910	0	1000	-1000 r_2910	0	1000	-1000
48	r_2911	0	1000	-1000 r_2911	0	1000	-1000
49	r_2912	0	1000	-1000 r_2912	0	1000	-1000
50	r_2913	0	1000	-1000 r_2913	0	1000	-1000
51	r_2914	0	1000	-1000 r_2914	0	1000	-1000
52							
53							
54							
55							
56							
57							
58							
59							
60							

1								
2	r_2915	0	1000	-1000	r_2915	0	1000	-1000
3	r_2916	0	1000	-1000	r_2916	0	1000	-1000
4	r_2917	0	1000	-1000	r_2917	0	1000	-1000
5	r_2918	0	1000	-1000	r_2918	0	1000	-1000
6	r_2919	0	1000	-1000	r_2919	0	1000	-1000
7	r_2920	0	1000	-1000	r_2920	0	1000	-1000
8	r_2921	0	1000	-1000	r_2921	0	1000	-1000
9	r_2922	0	1000	-1000	r_2922	0	1000	-1000
10	r_2923	0	1000	-1000	r_2923	0	1000	-1000
11	r_2924	0	1000	-1000	r_2924	0	1000	-1000
12	r_2925	0	1000	-1000	r_2925	0	1000	-1000
13	r_2926	0	1000	-1000	r_2926	0	1000	-1000
14	r_2927	0	1000	-1000	r_2927	0	1000	-1000
15	r_2928	0	1000	-1000	r_2928	0	1000	-1000
16	r_2929	0	1000	-1000	r_2929	0	1000	-1000
17	r_2930	0	1000	-1000	r_2930	0	1000	-1000
18	r_2931	0	1000	-1000	r_2931	0	1000	-1000
19	r_2932	0	1000	-1000	r_2932	0	1000	-1000
20	r_2933	0	1000	-1000	r_2933	0	1000	-1000
21	r_2934	0	1000	-1000	r_2934	0	1000	-1000
22	r_2935	0	1000	-1000	r_2935	0	1000	-1000
23	r_2936	0	1000	-1000	r_2936	0	1000	-1000
24	r_2937	0	1000	-1000	r_2937	0	1000	-1000
25	r_2938	0	1000	-1000	r_2938	0	1000	-1000
26	r_2939	0	1000	-1000	r_2939	0	1000	-1000
27	r_2940	0	1000	-1000	r_2940	0	1000	-1000
28	r_2941	0	1000	-1000	r_2941	0	1000	-1000
29	r_2942	0	1000	-1000	r_2942	0	1000	-1000
30	r_2943	0	1000	-1000	r_2943	0	1000	-1000
31	r_2944	0	1000	-1000	r_2944	0	1000	-1000
32	r_2945	0	1000	-1000	r_2945	0	1000	-1000
33	r_2946	0	1000	-1000	r_2946	0	1000	-1000
34	r_2947	0	1000	-1000	r_2947	0	1000	-1000
35	r_2948	-0.00038	1000	-1000	r_2948	0	1000	-1000
36	r_2949	0	1000	-1000	r_2949	0	1000	-1000
37	r_2950	0	1000	-1000	r_2950	0	1000	-1000
38	r_2951	0	1000	-1000	r_2951	0	1000	-1000
39	r_2952	0.00038	1000	-1000	r_2952	0	1000	-1000
40	r_2953	0	1000	-1000	r_2953	0	1000	-1000
41	r_2954	0	1000	-1000	r_2954	0	1000	-1000
42	r_2955	0	1000	-1000	r_2955	0	1000	-1000
43	r_2956	0	1000	-1000	r_2956	0	1000	-1000
44	r_2957	0	1000	-1000	r_2957	0	1000	-1000
45	r_2958	0	1000	-1000	r_2958	0	1000	-1000
46	r_2959	0	1000	-1000	r_2959	0	1000	-1000
47	r_2960	0	1000	-1000	r_2960	0	1000	-1000
48	r_2961	0	1000	-1000	r_2961	0	1000	-1000
49	r_2962	0	1000	-1000	r_2962	0	1000	-1000
50	r_2963	0	1000	-1000	r_2963	0	1000	-1000
51	r_2964	0	1000	-1000	r_2964	0	1000	-1000
52								
53								
54								
55								
56								
57								
58								
59								
60								

1								
2	r_2965	0	1000	-1000	r_2965	0	1000	-1000
3	r_2966	0	1000	-1000	r_2966	0	1000	-1000
4	r_2967	0	1000	-1000	r_2967	0	1000	-1000
5	r_2968	0	1000	-1000	r_2968	0	1000	-1000
6	r_2969	0	1000	-1000	r_2969	0	1000	-1000
7	r_2970	0	1000	-1000	r_2970	0	1000	-1000
8	r_2971	0	1000	-1000	r_2971	0	1000	-1000
9	r_2972	0	1000	-1000	r_2972	0	1000	-1000
10	r_2973	0	1000	-1000	r_2973	0	1000	-1000
11	r_2974	0	1000	-1000	r_2974	0	1000	-1000
12	r_2975	0	1000	-1000	r_2975	0	1000	-1000
13	r_2976	0	1000	-1000	r_2976	0	1000	-1000
14	r_2977	0	1000	-1000	r_2977	0	1000	-1000
15	r_2978	0	1000	-1000	r_2978	0	1000	-1000
16	r_2978	0	1000	-1000	r_2978	0	1000	-1000
17	r_2979	0	1000	-1000	r_2979	0	1000	-1000
18	r_2980	0	1000	-1000	r_2980	0	1000	-1000
19	r_2981	0	1000	-1000	r_2981	0	1000	-1000
20	r_2982	0	1000	-1000	r_2982	0	1000	-1000
21	r_2983	0	1000	-1000	r_2983	0	1000	-1000
22	r_2984	0	1000	-1000	r_2984	0	1000	-1000
23	r_2985	0	1000	-1000	r_2985	0	1000	-1000
24	r_2986	0	1000	-1000	r_2986	0	1000	-1000
25	r_2987	0	1000	-1000	r_2987	0	1000	-1000
26	r_2987	0	1000	-1000	r_2987	0	1000	-1000
27	r_2988	0	1000	-1000	r_2988	0	1000	-1000
28	r_2989	0	1000	-1000	r_2989	0	1000	-1000
29	r_2990	0	1000	-1000	r_2990	0	1000	-1000
30	r_2991	0	1000	-1000	r_2991	0	1000	-1000
31	r_2992	0	1000	-1000	r_2992	0	1000	-1000
32	r_2993	0	1000	-1000	r_2993	0	1000	-1000
33	r_2994	0	1000	-1000	r_2994	0	1000	-1000
34	r_2995	0	1000	-1000	r_2995	0	1000	-1000
35	r_2996	0	1000	-1000	r_2996	0	1000	-1000
36	r_2997	0	1000	-1000	r_2997	0	1000	-1000
37	r_2997	0	1000	-1000	r_2997	0	1000	-1000
38	r_2998	0	1000	-1000	r_2998	0	1000	-1000
39	r_2999	0	1000	-1000	r_2999	0	1000	-1000
40	r_3000	0	1000	-1000	r_3000	0	1000	-1000
41	r_3001	0	1000	-1000	r_3001	0	1000	-1000
42	r_3002	0	1000	-1000	r_3002	0	1000	-1000
43	r_3003	0	1000	-1000	r_3003	0	1000	-1000
44	r_3004	0	1000	-1000	r_3004	0	1000	-1000
45	r_3005	0	1000	-1000	r_3005	0	1000	-1000
46	r_3006	0	1000	-1000	r_3006	0	1000	-1000
47	r_3007	0	1000	-1000	r_3007	0	1000	-1000
48	r_3008	0	1000	-1000	r_3008	0	1000	-1000
49	r_3009	0	1000	-1000	r_3009	0	1000	-1000
50	r_3010	0	1000	-1000	r_3010	0	1000	-1000
51	r_3011	0	1000	-1000	r_3011	0	1000	-1000
52	r_3011	0	1000	-1000	r_3011	0	1000	-1000
53	r_3022	0	2.74E-05	0	r_3022	0	9.77E-05	0
54	r_3023	0	2.74E-05	0	r_3023	0	9.77E-05	0
55	r_3024	0	2.74E-05	0	r_3024	0	9.77E-05	0
56	r_3024	0	2.74E-05	0	r_3024	0	9.77E-05	0
57								
58								
59								
60								

1						
2	r_3025	0	2.74E-05	0 r_3025	0 9.77E-05	0
3	r_3026	0	2.74E-05	0 r_3026	0 9.77E-05	0
4	r_3027	0	2.74E-05	0 r_3027	0 9.77E-05	0
5	r_3028	0	2.74E-05	0 r_3028	0 9.77E-05	0
6	r_3029	0	2.74E-05	0 r_3029	0 9.77E-05	0
7	r_3030	0	1.13E-05	0 r_3030	0 3.97E-05	0
8	r_3031	0	1.13E-05	0 r_3031	0 3.97E-05	0
9	r_3032	0	1.13E-05	0 r_3032	0 3.97E-05	0
10	r_3033	0	1.13E-05	0 r_3033	0 3.97E-05	0
11	r_3034	0	1.07E-05	0 r_3034	0 3.78E-05	0
12	r_3035	0	1.07E-05	0 r_3035	0 3.78E-05	0
13	r_3036	0	1.07E-05	0 r_3036	0 3.78E-05	0
14	r_3037	0	1.07E-05	0 r_3037	0 3.78E-05	0
15	r_3038	0	1.07E-05	0 r_3038	0 3.78E-05	0
16	r_3039	0	1.07E-05	0 r_3039	0 3.78E-05	0
17	r_3040	0	1.07E-05	0 r_3040	0 3.78E-05	0
18	r_3041	0	1.07E-05	0 r_3041	0 3.78E-05	0
19	r_3042	0	1.07E-05	0 r_3042	0 3.78E-05	0
20	r_3043	0	1.07E-05	0 r_3043	0 3.78E-05	0
21	r_3044	0	1.07E-05	0 r_3044	0 3.78E-05	0
22	r_3045	0	1.07E-05	0 r_3045	0 3.78E-05	0
23	r_3046	0	0	0 r_3046	0 0	0
24	r_3047	0	0	0 r_3047	0 0	0
25	r_3048	0	0	0 r_3048	0 0	0
26	r_3049	0	0	0 r_3049	0 0	0
27	r_3050	0	0	0 r_3050	0 0	0
28	r_3051	0	0	0 r_3051	0 0	0
29	r_3052	0	0	0 r_3052	0 0	0
30	r_3053	0	0	0 r_3053	0 0	0
31	r_3054	0	0	0 r_3054	0 0	0
32	r_3055	0	0	0 r_3055	0 0	0
33	r_3056	0	0	0 r_3056	0 0	0
34	r_3057	0	0	0 r_3057	0 0	0
35	r_3058	0	0	0 r_3058	0 0	0
36	r_3059	0	0	0 r_3059	0 0	0
37	r_3060	0	0	0 r_3060	0 0	0
38	r_3061	0	0	0 r_3061	0 0	0
39	r_3062	0	0	0 r_3062	0 0	0
40	r_3063	0	0	0 r_3063	0 0	0
41	r_3064	0	0	0 r_3064	0 0	0
42	r_3065	0	0	0 r_3065	0 0	0
43	r_3066	0	0	0 r_3066	0 0	0
44	r_3067	0	0	0 r_3067	0 0	0
45	r_3068	0	0	0 r_3068	0 0	0
46	r_3069	0	0	0 r_3069	0 0	0
47	r_3070	0	1.14E-06	0 r_3070	0 4.06E-06	0
48	r_3071	0	1.14E-06	0 r_3071	0 4.06E-06	0
49	r_3072	0	1.14E-06	0 r_3072	0 4.06E-06	0
50	r_3073	0	1.14E-06	0 r_3073	0 4.06E-06	0
51	r_3074	0	1.14E-06	0 r_3074	0 4.06E-06	0

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2	r_3075	0	1.14E-06	0 r_3075	0	4.06E-06
3	r_3076	0	1.14E-06	0 r_3076	0	4.06E-06
4	r_3077	0	1.14E-06	0 r_3077	0	4.06E-06
5	r_3078	0	1.14E-06	0 r_3078	0	4.06E-06
6	r_3079	0	1.14E-06	0 r_3079	0	4.06E-06
7	r_3080	0	1.14E-06	0 r_3080	0	4.06E-06
8	r_3081	0	1.14E-06	0 r_3081	0	4.06E-06
9	r_3082	0	0	0 r_3082	0	0
10	r_3083	0	0	0 r_3083	0	0
11	r_3084	0	0	0 r_3084	0	0
12	r_3085	0	0	0 r_3085	0	0
13	r_3086	0	0	0 r_3086	0	0
14	r_3087	0	0	0 r_3087	0	0
15	r_3088	0	0	0 r_3088	0	0
16	r_3089	0	0	0 r_3089	0	0
17	r_3090	0	0	0 r_3090	0	0
18	r_3091	0	0	0 r_3091	0	0
19	r_3092	0	0	0 r_3092	0	0
20	r_3093	0	0	0 r_3093	0	0
21	r_3094	0	0	0 r_3094	0	0
22	r_3095	0	0	0 r_3095	0	0
23	r_3096	0	0	0 r_3096	0	0
24	r_3097	0	0	0 r_3097	0	0
25	r_3098	0	5.36E-05	0 r_3098	0	0.000117
26	r_3099	0	3.69E-05	0 r_3099	0	9.93E-05
27	r_3100	0	4.05E-05	0 r_3100	0	0.000103
28	r_3101	0	3.69E-05	0 r_3101	0	9.93E-05
29	r_3102	0	4.05E-05	0 r_3102	0	0.000103
30	r_3103	0	3.69E-05	0 r_3103	0	9.93E-05
31	r_3104	0	4.22E-05	0 r_3104	0	0.000114
32	r_3105	0	4.22E-05	0 r_3105	0	0.000114
33	r_3106	0	4.22E-05	0 r_3106	0	0.000114
34	r_3107	0	4.22E-05	0 r_3107	0	0.000114
35	r_3108	0	4.22E-05	0 r_3108	0	0.000114
36	r_3109	0	4.22E-05	0 r_3109	0	0.000114
37	r_3110	0	4.22E-05	0 r_3110	0	0.000114
38	r_3111	0	4.22E-05	0 r_3111	0	0.000114
39	r_3112	0	2.40E-05	0 r_3112	0	8.54E-05
40	r_3113	0	2.40E-05	0 r_3113	0	8.54E-05
41	r_3114	0	2.40E-05	0 r_3114	0	8.54E-05
42	r_3115	0	2.40E-05	0 r_3115	0	8.54E-05
43	r_3116	0	2.40E-05	0 r_3116	0	8.54E-05
44	r_3117	0	2.40E-05	0 r_3117	0	8.54E-05
45	r_3118	0	2.40E-05	0 r_3118	0	8.54E-05
46	r_3119	0	2.40E-05	0 r_3119	0	8.54E-05
47	r_3120	0	2.40E-05	0 r_3120	0	8.54E-05
48	r_3121	0	2.40E-05	0 r_3121	0	8.54E-05
49	r_3122	0	2.40E-05	0 r_3122	0	8.54E-05
50	r_3123	0	2.40E-05	0 r_3123	0	8.54E-05
51	r_3124	0	2.40E-05	0 r_3124	0	8.54E-05
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2	r_3125	0	2.40E-05	0 r_3125	0 8.54E-05	0
3	r_3126	0	2.40E-05	0 r_3126	0 8.54E-05	0
4	r_3127	0	2.40E-05	0 r_3127	0 8.54E-05	0
5	r_3128	0	4.80E-05	0 r_3128	0 0.000171	0
6	r_3129	0	4.80E-05	0 r_3129	0 0.000171	0
7	r_3130	0	4.80E-05	0 r_3130	0 0.000171	0
8	r_3131	0	4.80E-05	0 r_3131	0 0.000171	0
9	r_3132	0	4.80E-05	0 r_3132	0 0.000171	0
10	r_3133	0	4.80E-05	0 r_3133	0 0.000171	0
11	r_3134	0	4.80E-05	0 r_3134	0 0.000171	0
12	r_3135	0	4.80E-05	0 r_3135	0 0.000171	0
13	r_3136	0	4.80E-05	0 r_3136	0 0.000171	0
14	r_3137	0	4.80E-05	0 r_3137	0 0.000171	0
15	r_3138	0	4.80E-05	0 r_3138	0 0.000171	0
16	r_3139	0	4.80E-05	0 r_3139	0 0.000171	0
17	r_3140	0	4.80E-05	0 r_3140	0 0.000171	0
18	r_3141	0	4.80E-05	0 r_3141	0 0.000171	0
19	r_3142	0	4.80E-05	0 r_3142	0 0.000171	0
20	r_3143	0	4.80E-05	0 r_3143	0 0.000171	0
21	r_3144	0	4.80E-05	0 r_3144	0 0.000171	0
22	r_3145	0	4.80E-05	0 r_3145	0 0.000171	0
23	r_3146	0	4.80E-05	0 r_3146	0 0.000171	0
24	r_3147	0	4.80E-05	0 r_3147	0 0.000171	0
25	r_3148	0	4.80E-05	0 r_3148	0 0.000171	0
26	r_3149	0	4.80E-05	0 r_3149	0 0.000171	0
27	r_3150	0	4.80E-05	0 r_3150	0 0.000171	0
28	r_3151	0	4.80E-05	0 r_3151	0 0.000171	0
29	r_3152	0	4.80E-05	0 r_3152	0 0.000171	0
30	r_3153	0	4.80E-05	0 r_3153	0 0.000171	0
31	r_3154	0	4.80E-05	0 r_3154	0 0.000171	0
32	r_3155	0	4.80E-05	0 r_3155	0 0.000171	0
33	r_3156	0	4.80E-05	0 r_3156	0 0.000171	0
34	r_3157	0	4.80E-05	0 r_3157	0 0.000171	0
35	r_3158	0	4.80E-05	0 r_3158	0 0.000171	0
36	r_3159	0	4.80E-05	0 r_3159	0 0.000171	0
37	r_3160	0	4.80E-05	0 r_3160	0 0.000171	0
38	r_3161	0	4.80E-05	0 r_3161	0 0.000171	0
39	r_3162	0	4.80E-05	0 r_3162	0 0.000171	0
40	r_3163	0	4.80E-05	0 r_3163	0 0.000171	0
41	r_3164	0	4.80E-05	0 r_3164	0 0.000171	0
42	r_3165	0	4.80E-05	0 r_3165	0 0.000171	0
43	r_3166	0	4.80E-05	0 r_3166	0 0.000171	0
44	r_3167	0	4.80E-05	0 r_3167	0 0.000171	0
45	r_3168	0	4.80E-05	0 r_3168	0 0.000171	0
46	r_3169	0	4.80E-05	0 r_3169	0 0.000171	0
47	r_3170	0	4.80E-05	0 r_3170	0 0.000171	0
48	r_3171	0	4.80E-05	0 r_3171	0 0.000171	0
49	r_3172	0	4.80E-05	0 r_3172	0 0.000171	0
50	r_3173	0	4.80E-05	0 r_3173	0 0.000171	0
51	r_3174	0	4.80E-05	0 r_3174	0 0.000171	0

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2	r_3175	0	4.80E-05	0 r_3175	0	0.000171	0
3	r_3176	0	2.40E-05	0 r_3176	0	8.54E-05	0
4	r_3177	0	2.40E-05	0 r_3177	0	8.54E-05	0
5	r_3178	0	2.40E-05	0 r_3178	0	8.54E-05	0
6	r_3179	0	2.40E-05	0 r_3179	0	8.54E-05	0
7	r_3180	0	2.40E-05	0 r_3180	0	8.54E-05	0
8	r_3181	0	2.40E-05	0 r_3181	0	8.54E-05	0
9	r_3182	0	2.40E-05	0 r_3182	0	8.54E-05	0
10	r_3183	0	2.40E-05	0 r_3183	0	8.54E-05	0
11	r_3184	0	2.40E-05	0 r_3184	0	8.54E-05	0
12	r_3185	0	2.40E-05	0 r_3185	0	8.54E-05	0
13	r_3186	0	2.40E-05	0 r_3186	0	8.54E-05	0
14	r_3187	0	2.40E-05	0 r_3187	0	8.54E-05	0
15	r_3188	0	2.40E-05	0 r_3188	0	8.54E-05	0
16	r_3189	0	2.40E-05	0 r_3189	0	8.54E-05	0
17	r_3190	0	2.40E-05	0 r_3190	0	8.54E-05	0
18	r_3191	0	2.40E-05	0 r_3191	0	8.54E-05	0
19	r_3192	0	4.80E-05	0 r_3192	0	0.000171	0
20	r_3193	0	4.80E-05	0 r_3193	0	0.000171	0
21	r_3194	0	4.80E-05	0 r_3194	0	0.000171	0
22	r_3195	0	4.80E-05	0 r_3195	0	0.000171	0
23	r_3196	0	4.80E-05	0 r_3196	0	0.000171	0
24	r_3197	0	4.80E-05	0 r_3197	0	0.000171	0
25	r_3198	0	4.80E-05	0 r_3198	0	0.000171	0
26	r_3199	0	4.80E-05	0 r_3199	0	0.000171	0
27	r_3200	0	4.80E-05	0 r_3200	0	0.000171	0
28	r_3201	0	4.80E-05	0 r_3201	0	0.000171	0
29	r_3202	0	4.80E-05	0 r_3202	0	0.000171	0
30	r_3203	0	4.80E-05	0 r_3203	0	0.000171	0
31	r_3204	0	4.80E-05	0 r_3204	0	0.000171	0
32	r_3205	0	4.80E-05	0 r_3205	0	0.000171	0
33	r_3206	0	4.80E-05	0 r_3206	0	0.000171	0
34	r_3207	0	4.80E-05	0 r_3207	0	0.000171	0
35	r_3208	0	4.80E-05	0 r_3208	0	0.000171	0
36	r_3209	0	4.80E-05	0 r_3209	0	0.000171	0
37	r_3210	0	4.80E-05	0 r_3210	0	0.000171	0
38	r_3211	0	4.80E-05	0 r_3211	0	0.000171	0
39	r_3212	0	4.80E-05	0 r_3212	0	0.000171	0
40	r_3213	0	4.80E-05	0 r_3213	0	0.000171	0
41	r_3214	0	4.80E-05	0 r_3214	0	0.000171	0
42	r_3215	0	4.80E-05	0 r_3215	0	0.000171	0
43	r_3216	0	4.80E-05	0 r_3216	0	0.000171	0
44	r_3217	0	4.80E-05	0 r_3217	0	0.000171	0
45	r_3218	0	4.80E-05	0 r_3218	0	0.000171	0
46	r_3219	0	4.80E-05	0 r_3219	0	0.000171	0
47	r_3220	0	4.80E-05	0 r_3220	0	0.000171	0
48	r_3221	0	4.80E-05	0 r_3221	0	0.000171	0
49	r_3222	0	4.80E-05	0 r_3222	0	0.000171	0
50	r_3223	0	4.80E-05	0 r_3223	0	0.000171	0
51	r_3224	0	4.80E-05	0 r_3224	0	0.000171	0
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2	r_3225	0	4.80E-05	0 r_3225	0 0.000171	0
3	r_3226	0	4.80E-05	0 r_3226	0 0.000171	0
4	r_3227	0	4.80E-05	0 r_3227	0 0.000171	0
5	r_3228	0	4.80E-05	0 r_3228	0 0.000171	0
6	r_3229	0	4.80E-05	0 r_3229	0 0.000171	0
7	r_3230	0	4.80E-05	0 r_3230	0 0.000171	0
8	r_3231	0	4.80E-05	0 r_3231	0 0.000171	0
9	r_3232	0	4.80E-05	0 r_3232	0 0.000171	0
10	r_3233	0	4.80E-05	0 r_3233	0 0.000171	0
11	r_3234	0	4.80E-05	0 r_3234	0 0.000171	0
12	r_3235	0	4.80E-05	0 r_3235	0 0.000171	0
13	r_3236	0	4.80E-05	0 r_3236	0 0.000171	0
14	r_3237	0	4.80E-05	0 r_3237	0 0.000171	0
15	r_3238	0	4.80E-05	0 r_3238	0 0.000171	0
16	r_3239	0	4.80E-05	0 r_3239	0 0.000171	0
17	r_3240	0	0	0 r_3240	0 0	0
18	r_3241	0	0	0 r_3241	0 0	0
19	r_3242	0	0	0 r_3242	0 0	0
20	r_3243	0	0	0 r_3243	0 0	0
21	r_3244	0	0	0 r_3244	0 0	0
22	r_3245	0	0	0 r_3245	0 0	0
23	r_3246	0	0	0 r_3246	0 0	0
24	r_3247	0	0	0 r_3247	0 0	0
25	r_3248	0	0	0 r_3248	0 0	0
26	r_3249	0	0	0 r_3249	0 0	0
27	r_3250	0	0	0 r_3250	0 0	0
28	r_3251	0	0	0 r_3251	0 0	0
29	r_3252	0	2.74E-05	0 r_3252	0 9.77E-05	0
30	r_3253	0	2.74E-05	0 r_3253	0 9.77E-05	0
31	r_3254	0	2.74E-05	0 r_3254	0 9.77E-05	0
32	r_3255	0	2.74E-05	0 r_3255	0 9.77E-05	0
33	r_3256	0	2.74E-05	0 r_3256	0 9.77E-05	0
34	r_3257	0	2.74E-05	0 r_3257	0 9.77E-05	0
35	r_3258	0	2.74E-05	0 r_3258	0 9.77E-05	0
36	r_3259	0	2.74E-05	0 r_3259	0 9.77E-05	0
37	r_3260	0	2.74E-05	0 r_3260	0 9.77E-05	0
38	r_3261	0	2.74E-05	0 r_3261	0 9.77E-05	0
39	r_3262	0	2.74E-05	0 r_3262	0 9.77E-05	0
40	r_3263	0	2.74E-05	0 r_3263	0 9.77E-05	0
41	r_3264	0	2.74E-05	0 r_3264	0 9.77E-05	0
42	r_3265	0	2.74E-05	0 r_3265	0 9.77E-05	0
43	r_3266	0	2.74E-05	0 r_3266	0 9.77E-05	0
44	r_3267	0	2.74E-05	0 r_3267	0 9.77E-05	0
45	r_3268	0	2.74E-05	0 r_3268	0 9.77E-05	0
46	r_3269	0	2.74E-05	0 r_3269	0 9.77E-05	0
47	r_3270	0	2.74E-05	0 r_3270	0 9.77E-05	0
48	r_3271	0	2.74E-05	0 r_3271	0 9.77E-05	0
49	r_3272	0	2.74E-05	0 r_3272	0 9.77E-05	0
50	r_3273	0	2.74E-05	0 r_3273	0 9.77E-05	0
51	r_3274	0	2.74E-05	0 r_3274	0 9.77E-05	0

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2	r_3275	0	2.74E-05	0 r_3275	0 9.77E-05	0
3	r_3276	0	2.74E-05	0 r_3276	0 9.77E-05	0
4	r_3277	0	2.74E-05	0 r_3277	0 9.77E-05	0
5	r_3278	0	2.74E-05	0 r_3278	0 9.77E-05	0
6	r_3279	0	2.74E-05	0 r_3279	0 9.77E-05	0
7	r_3280	0	2.74E-05	0 r_3280	0 9.77E-05	0
8	r_3281	0	2.74E-05	0 r_3281	0 9.77E-05	0
9	r_3282	0	2.74E-05	0 r_3282	0 9.77E-05	0
10	r_3283	0	2.74E-05	0 r_3283	0 9.77E-05	0
11	r_3284	0	2.74E-05	0 r_3284	0 9.77E-05	0
12	r_3285	0	2.74E-05	0 r_3285	0 9.77E-05	0
13	r_3286	0	2.74E-05	0 r_3286	0 9.77E-05	0
14	r_3287	0	2.74E-05	0 r_3287	0 9.77E-05	0
15	r_3288	0	2.74E-05	0 r_3288	0 9.77E-05	0
16	r_3289	0	2.74E-05	0 r_3289	0 9.77E-05	0
17	r_3290	0	2.74E-05	0 r_3290	0 9.77E-05	0
18	r_3291	0	2.74E-05	0 r_3291	0 9.77E-05	0
19	r_3292	0	2.74E-05	0 r_3292	0 9.77E-05	0
20	r_3293	0	2.74E-05	0 r_3293	0 9.77E-05	0
21	r_3294	0	2.74E-05	0 r_3294	0 9.77E-05	0
22	r_3295	0	2.74E-05	0 r_3295	0 9.77E-05	0
23	r_3296	0	1.19E-05	0 r_3296	0 4.22E-05	0
24	r_3297	0	1.19E-05	0 r_3297	0 4.22E-05	0
25	r_3298	0	1.19E-05	0 r_3298	0 4.22E-05	0
26	r_3299	0	1.19E-05	0 r_3299	0 4.22E-05	0
27	r_3300	0	1.19E-05	0 r_3300	0 4.22E-05	0
28	r_3301	0	1.19E-05	0 r_3301	0 4.22E-05	0
29	r_3302	0	1.19E-05	0 r_3302	0 4.22E-05	0
30	r_3303	0	1.19E-05	0 r_3303	0 4.22E-05	0
31	r_3304	0	0	0 r_3304	0 0	0
32	r_3305	0	0	0 r_3305	0 0	0
33	r_3306	0	0	0 r_3306	0 0	0
34	r_3307	0	0	0 r_3307	0 0	0
35	r_3308	0	1.19E-05	0 r_3308	0 4.22E-05	0
36	r_3309	0	1.19E-05	0 r_3309	0 4.22E-05	0
37	r_3310	0	1.19E-05	0 r_3310	0 4.22E-05	0
38	r_3311	0	1.19E-05	0 r_3311	0 4.22E-05	0
39	r_3312	0	2.74E-05	0 r_3312	0 9.77E-05	0
40	r_3313	0	2.74E-05	0 r_3313	0 9.77E-05	0
41	r_3314	0	2.74E-05	0 r_3314	0 9.77E-05	0
42	r_3315	0	2.74E-05	0 r_3315	0 9.77E-05	0
43	r_3316	0	2.74E-05	0 r_3316	0 9.77E-05	0
44	r_3317	0	2.74E-05	0 r_3317	0 9.77E-05	0
45	r_3318	0	2.74E-05	0 r_3318	0 9.77E-05	0
46	r_3319	0	2.74E-05	0 r_3319	0 9.77E-05	0
47	r_3320	0	2.74E-05	0 r_3320	0 9.77E-05	0
48	r_3321	0	2.74E-05	0 r_3321	0 9.77E-05	0
49	r_3322	0	2.74E-05	0 r_3322	0 9.77E-05	0
50	r_3323	0	2.74E-05	0 r_3323	0 9.77E-05	0
51	r_3324	0	2.74E-05	0 r_3324	0 9.77E-05	0
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2	r_3325	0	2.74E-05	0 r_3325	0	9.77E-05	0
3	r_3326	0	2.74E-05	0 r_3326	0	9.77E-05	0
4	r_3327	0	2.74E-05	0 r_3327	0	9.77E-05	0
5	r_3328	0	2.74E-05	0 r_3328	0	9.77E-05	0
6	r_3329	0	2.74E-05	0 r_3329	0	9.77E-05	0
7	r_3330	0	2.74E-05	0 r_3330	0	9.77E-05	0
8	r_3331	0	2.74E-05	0 r_3331	0	9.77E-05	0
9	r_4039	0	3.69E-05	-4.84E-05 r_4039	0	0.000131	-0.00017
10	r_4042	0	0	0 r_4042	0	0	0
11	r_4045	0	4.80E-05	0 r_4045	0	0.000171	0
12	r_0964	0	4.80E-05	0 r_0964	0	0.000171	0
13	r_1028	0	0	0 r_1028	0	0	0
14	r_1085	0	4.80E-05	0 r_1085	0	0.000171	0
15	r_1086	0	4.80E-05	0 r_1086	0	0.000171	0
16	r_1096	0	0	-1.76E-06 r_1096	0	0	-6.27E-06
17	r_1097	0	2.41E-06	0 r_1097	0	8.59E-06	0
18	r_1098	0	1.23E-06	0 r_1098	0	4.38E-06	0
19	r_1099	0.02518	0.0251814	0.02518 r_1099	0.027119	0.027125	0.027119
20	r_1100	0	0	0 r_1100	0	0	0
21	r_1101	0	0	0 r_1101	0	0	0
22	r_1103	0	0	0 r_1102	0	0	0
23	r_1104	0	0	0 r_1103	0	0	0
24	r_1106	0	6.62E-06	0 r_1104	0	0	0
25	r_1107	0	2.44E-06	0 r_1106	0	2.36E-05	0
26	r_1108	0	0	0 r_1107	0	8.67E-06	0
27	r_1109	0	0	0 r_1108	0	0	0
28	r_1110	6.042536	6.0427056	6.042456 r_1109	0	0	0
29	r_1111	0	0	0 r_1110	6.115352	6.115956	6.115184
30	r_1112	-0.13332	1000	-1000 r_1111	0	0	0
31	r_1113	0	0	0 r_1112	-0.1273	1000	-1000
32	r_1114	0	0	0 r_1113	0	0	0
33	r_1115	0.597736	0.5977533	0.597731 r_1114	0	0	0
34	r_1116	0	2.74E-05	0 r_1115	0.529755	0.529817	0.529737
35	r_1118	0	1000	0 r_1116	0	9.77E-05	0
36	r_1119	0	0	0 r_1118	0	1000	0
37	r_1120	0	3.69E-05	0 r_1119	0	0	0
38	r_1121	0	6.12E-05	0 r_1120	0	0.000131	0
39	r_1122	0	6.12E-05	0 r_1121	3.59E-05	0.000134	0
40	r_1123	0	6.12E-05	0 r_1122	0	0.000134	0
41	r_1124	3.33E-05	6.12E-05	0 r_1123	0	0.000134	0
42	r_1125	0	0	0 r_1124	0	0.000134	0
43	r_1126	-0.08963	1000	-1000 r_1125	0	0	0
44	r_1127	-0.03838	-0.038185	-0.03838 r_1126	-0.09654	1000	-1000
45	r_1128	0	1000	-1000 r_1127	-0.02504	-0.02436	-0.02505
46	r_1129	0.003616	0.0036396	0.003603 r_1128	0	1000	-1000
47	r_1130	0	5.36E-05	0 r_1129	0.003895	0.003957	0.003848
48	r_1131	0	4.76E-05	0 r_1130	0	0.000117	0
49	r_1132	0	0	0 r_1131	0	0.000104	0
50	r_1133	0	0	0 r_1132	0	0	0
51	r_1134	0	0	0 r_1133	0	0	0

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2	r_1135	0	0	0	r_1134	0	0	0
3	r_1136	0	0	-3.78E-06	r_1135	0	0	0
4	r_1137	0	0.2676	0	r_1136	0	0	-1.35E-05
5	r_1138	0	1.92E-05	-0.2676	r_1137	0	0.288687	0
6	r_1139	0	0	0	r_1138	0	6.84E-05	-0.28869
7	r_1146	0	0	-2.32E-07	r_1139	0	0	0
8	r_1147	0	0	-2.30E-07	r_1146	0	0	-8.26E-07
9	r_1148	0	1000	-1000	r_1147	0	0	-8.18E-07
10	r_1149	0	0	0	r_1148	0	1000	-1000
11	r_1151	0	0	0	r_1149	0	0	0
12	r_1161	0	0	-2.32E-07	r_1151	0	0	0
13	r_1162	0	0	0	r_1161	0	0	-8.26E-07
14	r_1164	0	0	0	r_1162	0	0	0
15	r_1165	0	0	0	r_1164	0	0	0
16	r_1166	1	1	0.999998	r_1165	0	0	0
17	r_1167	0	0	0	r_1166	1	1	0.999993
18	r_1168	0	0	-4.80E-05	r_1167	0	0	0
19	r_1169	0	0	-1.14E-06	r_1168	0	0	-0.00017
20	r_1170	0	0	-8.68E-07	r_1169	0	0	-4.06E-06
21	r_1171	0	1000	0	r_1170	0	0	-3.09E-06
22	r_1172	0	1000	0	r_1171	0	1000	0
23	r_1173	0	0	-7.75E-06	r_1172	0	1000	0
24	r_1174	0	2.74E-05	0	r_1173	0	0	-2.76E-05
25	r_1175	0	3.87E-05	0	r_1174	0	9.77E-05	0
26	r_1176	0	0	-2.22E-06	r_1175	0	0.000137	0
27	r_1177	0	0	0	r_1176	0	0	-7.89E-06
28	r_1179	0	8.80E-08	0	r_1177	0	0	0
29	r_1180	0	1.30E-06	0	r_1178	9.48E-08	9.48E-08	9.48E-08
30	r_1181	0	1.56E-06	0	r_1179	9.48E-08	9.48E-08	9.48E-08
31	r_1182	0.00E+00	0.00E+00	0.00E+00	r_1180	0	4.61E-06	0
32	r_1183	0.00E+00	0.00E+00	-4.31E-06	r_1181	0	5.54E-06	0
33	r_1184	0	0	-1.72E-06	r_1182	0	0	0
34	r_1185	0	0	0	r_1183	0	0	-1.53E-05
35	r_1186	0	0	-1.75E-05	r_1184	0	0	-6.10E-06
36	r_1187	0	1000	0	r_1185	0	0	0
37	r_1188	0	1000	0	r_1186	0	0	-6.21E-05
38	r_1189	0	0	0	r_1187	0	1000	0
39	r_1190	0	1.75E-05	-3.95E-06	r_1188	0	1000	0
40	r_1191	0	0	0	r_1189	0	0	0
41	r_1192	0	0	-1.36E-07	r_1190	0	6.21E-05	-1.41E-05
42	r_1193	0	0	0	r_1191	0	0	0
43	r_1194	0.067006	0.0671664	0.066814	r_1192	0	0	-8.06E-06
44	r_1195	0	0	0	r_1193	0	0	0
45	r_1196	0	0	-2.65E-06	r_1194	0.055879	0.056448	0.055195
46	r_1197	0	1000	0	r_1195	0	0	0
47	r_1198	0	1000	0	r_1196	0	0	-9.42E-06
48	r_1199	0	0	-2.51E-06	r_1197	0	1000	0
49	r_1200	0	0	0	r_1198	0	1000	0
50	r_1201	0	0	-1.72E-06	r_1199	0	0	-8.92E-06
51	r_1202	0	1000	-1000	r_1200	0	0	0
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2	r_1203	0	1000	0 r_1201	0	0	-6.13E-06
3	r_1204	0	1000	0 r_1202	0	1000	-1000
4	r_1205	0	0	-1.58E-06 r_1203	0	1000	0
5	r_1206	0	0	0 r_1204	0	1000	0
6	r_1207	0	0	0 r_1205	0	0	-5.61E-06
7	r_1208	0	1000	-1000 r_1206	0	0	0
8	r_1209	0	1000	0 r_1207	0	0	0
9	r_1210	0	1000	0 r_1208	0	1000	-1000
10	r_1211	0	0	-1.69E-06 r_1209	0	1000	0
11	r_1212	0	0	0 r_1210	0	1000	0
12	r_1213	0	0	-1.56E-06 r_1211	0	0	-6.00E-06
13	r_1214	0	0	-1.31E-07 r_1212	0	0	0
14	r_1215	0	0	-1.15E-06 r_1213	0	0	-5.57E-06
15	r_1216	0	0	-2.11E-06 r_1214	0	0	-4.95E-06
16	r_1217	0	0	-4.51E-06 r_1215	0	0	-4.10E-06
17	r_1218	0	0	-2.73E-06 r_1216	0	0	-7.50E-06
18	r_1219	0	0	-9.29E-07 r_1217	0	0	-1.60E-05
19	r_1220	0	1000	-1000 r_1218	0	0	-9.71E-06
20	r_1221	0	1000	0 r_1219	0	0	-3.31E-06
21	r_1222	0	1000	0 r_1220	0	1000	-1000
22	r_1223	0	0	-1.21E-06 r_1221	0	1000	0
23	r_1224	0	0	-2.15E-06 r_1222	0	1000	0
24	r_1225	0	0	-2.68E-07 r_1223	0	0	-4.30E-06
25	r_1226	0	0.0001921	0 r_1224	0	0	-7.66E-06
26	r_1227	0	0	0 r_1225	0	0	-9.53E-07
27	r_1228	0	5.56E-07	0 r_1226	0	0.000684	0
28	r_1229	0	0	0 r_1227	0	0	0
29	r_1230	0	0	0 r_1228	0	1.98E-06	0
30	r_1231	0	0	0 r_1229	0	0	0
31	r_1232	0	0	0 r_1230	0	0	0
32	r_1233	0	0	0 r_1231	0	0	0
33	r_1234	0	0	0 r_1232	0	0	0
34	r_1235	0	0	0 r_1233	0	0	0
35	r_1236	0	1.08E-05	-1.75E-05 r_1232	0	0	0
36	r_1237	0.028629	0.0286578	0.028437 r_1235	0	0	0
37	r_1238	0	0	-2.11E-06 r_1236	0	3.84E-05	-6.21E-05
38	r_1239	0	0.0001921	0 r_1237	0.030834	0.030937	0.03015
39	r_1241	0	0	-9.33E-07 r_1238	0	0	-7.50E-06
40	r_1242	0	0	0 r_1239	0	0.000684	0
41	r_1243	0	9.57E-07	0 r_1241	0	0	-3.32E-06
42	r_1244	0.11521	0.1152125	0.115205 r_1242	0	0	0
43	r_1245	4.342508	4.3428733	4.342403 r_1243	0	3.40E-06	0
44	r_1249	0	0	0 r_1244	0.075217	0.075228	0.075203
45	r_1250	0	1000	0 r_1245	4.463558	4.464858	4.463238
46	r_1251	0	1000	-2.11E-06 r_1249	0	0	0
47	r_1252	0	0	0 r_1250	0	1000	0
48	r_1253	0	0	0 r_1251	0	1000	-7.50E-06
49	r_1254	0	0	-5.22E-06 r_1252	0	0	0
50	r_1255	0	0	0 r_1253	0	0	0
51	r_1256	0	0	0 r_1254	0	0	-1.86E-05
52	r_1257	0	0	0 r_1255	0	0	0
53	r_1258	0	0	0 r_1256	0	0	0

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2	r_1259	0	1000	0	r_1257	0	0	0
3	r_1260	0	1000	-1.02E-06	r_1258	0	0	0
4	r_1261	0	0	0	r_1259	0	1000	0
5	r_1262	0	0	-6.70E-07	r_1260	0	1000	-3.62E-06
6	r_1263	0	0	0	r_1261	0	0	0
7	r_1264	0	0.0001921	0	r_1262	0	0	-2.38E-06
8	r_1265	2.985696	3.8199085	0.009538	r_1263	0	0	0
9	r_1266	0.006801	0.006813	0.006801	r_1264	0	0.000684	0
10	r_1267	0	1.22E-05	0	r_1265	3.873958	3.874018	0.009796
11	r_1268	0	0	0	r_1266	0.007325	0.007368	0.007325
12	r_1269	0	0	0	r_1267	0	4.33E-05	0
13	r_1270	0	0	0	r_1268	0	0	0
14	r_1271	0	0	0	r_1269	0	0	0
15	r_1272	0	0	0	r_1270	0	0	0
16	r_1273	0	0	-9.24E-06	r_1271	0	0	0
17	r_1274	0	0	0	r_1272	0	0	0
18	r_1275	0	0	0	r_1273	0	0	-3.29E-05
19	r_1276	0	0	0	r_1274	0	0	0
20	r_1277	-3.72208	-3.722019	-3.72213	r_1275	0	0	0
21	r_1278	0	0	-2.43E-07	r_1276	0	0	0
22	r_1279	-0.02608	1000	-1000	r_1277	-3.53034	-3.53013	-3.53053
23	r_1280	0	1000	-1000	r_1278	0	0	-8.64E-07
24	r_1281	-0.03961	1000	-1000	r_1279	-0.02809	1000	-1000
25	r_1282	8.80E-08	8.80E-08	-0.00011	r_1280	0	1000	-1000
26	r_1283	0	0	0	r_1281	-0.05895	1000	-1000
27	r_1284	0	0	0	r_1657	0	0	0
28	r_1285	0	0	0	r_2034	0.288005	0.288687	0
29	r_1286	0.00E+00	0.00E+00	-1.07E-04	r_2079	0	3.45E-06	0
30	r_1287	0	0.0001067	0	r_2132	0	1000	0
31	r_1288	0	0	0	r_2219	0	6.21E-05	0
32	r_1289	0	0	0	r_2220	0	6.21E-05	0
33	r_1290	8.80E-08	8.80E-08	8.80E-08	r_2221	0	6.21E-05	0
34	r_1291	0	0	0	r_2222	0	6.21E-05	0
35	r_1292	0	0	0	r_2223	0	6.21E-05	0
36	r_1293	0	0	0	r_2224	0	6.21E-05	0
37	r_1294	8.80E-08	8.80E-08	0.00E+00	r_2225	0	2.37E-05	0
38	r_1295	0	0.0001	0	r_2226	0	1.47E-05	0
39	r_1296	0	0	0	r_2227	0	1.06E-05	0
40	r_1297	0	0	0	r_2228	0	8.32E-06	0
41	r_1299	0.00E+00	0.00E+00	0.00E+00	r_3348	4.08E-05	4.08E-05	0
42	r_1300	0	1000	-1000	r_3349	0	4.08E-05	0
43	r_1301	0.00E+00	0.00E+00	0.00E+00	r_3350	0	4.08E-05	0
44	r_1302	0	0	0	r_3351	0	4.08E-05	0
45	r_1303	0	0	0	r_3352	0	4.08E-05	0
46	r_1304	0	0	0	r_3353	0	4.08E-05	0
47	r_1305	0	0	0	r_3354	0	4.08E-05	0
48	r_1306	0	0.0001	0	r_3355	0	4.08E-05	0
49	r_1307	0	0	0	r_3356	0	3.95E-05	0
50	r_1308	0	0	0	r_3357	0	3.95E-05	0
51	r_1309	0	0	0	r_3358	0	3.95E-05	0
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2	r_1310	0	0	0 r_3359	0 3.95E-05	0
3	r_1311	0	0	0 r_3360	0 3.95E-05	0
4	r_1312	0	0	0 r_3361	0 3.95E-05	0
5	r_1313	0	0	0 r_3362	0 3.95E-05	0
6	r_1314	0	0	0 r_3363	0 3.95E-05	0
7	r_1315	0	0	0 r_3364	0 4.08E-05	0
8	r_1316	0	0.0001067	0 r_3365	0 4.08E-05	0
9	r_1317	0	0.0001067	0 r_3366	0 4.08E-05	0
10	r_1318	0	0.0001067	0 r_3367	0 4.08E-05	0
11	r_1319	0	0.0001067	0 r_3368	0 4.08E-05	0
12	r_1320	0	0.0001067	0 r_3369	0 4.08E-05	0
13	r_1321	0	0	0 r_3370	0 4.08E-05	0
14	r_1322	0	0	0 r_3371	0 4.08E-05	0
15	r_1323	0	0	0 r_3372	0 3.95E-05	0
16	r_1324	0	0	0 r_3373	0 3.94E-05	0
17	r_1325	0	0	0 r_3374	0 3.94E-05	0
18	r_1326	0	0	0 r_3375	0 3.94E-05	0
19	r_1327	0	0	0 r_3376	0 3.94E-05	0
20	r_1328	0	0	0 r_3377	0 3.94E-05	0
21	r_1329	0	0	0 r_3378	0 3.94E-05	0
22	r_1330	0	0	0 r_3379	0 3.94E-05	0
23	r_1331	0	0	0 r_3380	0 4.08E-05	0
24	r_1332	0	0	0 r_3381	0 4.08E-05	0
25	r_1333	0	0.0001067	0 r_3382	0 4.08E-05	0
26	r_1334	0	0.0001067	0 r_3383	0 4.08E-05	0
27	r_1335	0	0.0001067	0 r_3384	0 4.08E-05	0
28	r_1336	0	0.0001067	0 r_3385	0 4.08E-05	0
29	r_1337	0	0.0001067	0 r_3386	0 4.08E-05	0
30	r_1338	0	0.0001067	0 r_3387	0 4.08E-05	0
31	r_1339	0	0.0001067	0 r_3388	0 3.95E-05	0
32	r_1340	0	0.0001067	0 r_3389	0 3.94E-05	0
33	r_1341	0	0.0001067	0 r_3390	0 3.94E-05	0
34	r_1342	0	0.0001067	0 r_3391	0 3.94E-05	0
35	r_1343	0	0.0001067	0 r_3392	0 3.94E-05	0
36	r_1344	0	0.0001067	0 r_3393	0 3.94E-05	0
37	r_1345	0	0.0001067	0 r_3394	0 3.94E-05	0
38	r_1346	0	0.0001067	0 r_3395	0 3.94E-05	0
39	r_1347	0	0.0001067	0 r_3396	0 4.08E-05	0
40	r_1348	0	0	0 r_3397	0 4.05E-05	0
41	r_1349	0	0	0 r_3398	0 4.07E-05	0
42	r_1350	0	0	0 r_3399	0 4.05E-05	0
43	r_1351	0	0	0 r_3400	0 4.07E-05	0
44	r_1352	0	0	0 r_3401	0 4.05E-05	0
45	r_1353	0	0	0 r_3402	0 4.05E-05	0
46	r_1354	0	0	0 r_3403	0 4.05E-05	0
47	r_1355	0	0	0 r_3404	0 2.83E-05	0
48	r_1356	0	0	0 r_3405	0 2.72E-05	0
49	r_1657	0	0	0 r_3406	0 2.72E-05	0
50	r_2034	0.267408	0.2676	0 r_3407	0 2.72E-05	0
51	r_2079	0	9.69E-07	0 r_3408	0 2.72E-05	0
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2	r_2132	0	1000	0 r_3409	0	2.72E-05	0
3	r_2219	0	1.75E-05	0 r_3410	0.00E+00	2.72E-05	0
4	r_2220	0	1.75E-05	0 r_3411	0	2.72E-05	0
5	r_2221	0	1.75E-05	0 r_3412	0	2.92E-05	0
6	r_2222	0	1.75E-05	0 r_3413	0	2.80E-05	0
7	r_2223	0	1.75E-05	0 r_3414	0	2.80E-05	0
8	r_2224	0	1.75E-05	0 r_3415	0	2.80E-05	0
9	r_2225	0	6.67E-06	0 r_3416	0	2.80E-05	0
10	r_2226	0	4.12E-06	0 r_3417	0	2.80E-05	0
11	r_2227	0	2.98E-06	0 r_3418	0.00E+00	2.80E-05	0
12	r_2228	0	2.34E-06	0 r_3419	0	2.80E-05	0
13	r_3348	3.79E-05	3.79E-05	0 r_3420	0	2.14E-05	0
14	r_3349	0	3.79E-05	0 r_3421	0	2.08E-05	0
15	r_3350	0.00E+00	3.79E-05	0.00E+00 r_3422	0.00E+00	2.08E-05	0
16	r_3351	0	3.79E-05	0 r_3423	0	2.08E-05	0
17	r_3352	0.00E+00	3.79E-05	0.00E+00 r_3424	0.00E+00	2.08E-05	0
18	r_3353	0	3.79E-05	0 r_3425	0	2.08E-05	0
19	r_3354	0	3.79E-05	0 r_3426	0	2.08E-05	0
20	r_3355	0	3.79E-05	0 r_3427	0	2.08E-05	0
21	r_3356	0	2.25E-05	0 r_3428	4.08E-05	1.75E-04	0
22	r_3357	0	2.02E-05	0 r_3429	0	1.31E-04	0
23	r_3358	0.00E+00	2.02E-05	0.00E+00 r_3430	0	1.40E-04	0
24	r_3359	0	2.02E-05	0 r_3431	0	1.31E-04	0
25	r_3360	0	2.02E-05	0 r_3432	0	1.40E-04	0
26	r_3361	0	2.02E-05	0 r_3433	0	1.31E-04	0
27	r_3362	0	2.02E-05	0 r_3434	0	1.31E-04	0
28	r_3363	0	2.02E-05	0 r_3435	0	1.31E-04	0
29	r_3364	0	2.46E-05	0 r_3436	0	1.34E-04	0
30	r_3365	0	2.18E-05	0 r_3437	0	1.14E-04	0
31	r_3366	0	2.18E-05	0 r_3438	0	1.18E-04	0
32	r_3367	0	2.18E-05	0 r_3439	0	1.14E-04	0
33	r_3368	0	2.18E-05	0 r_3440	0	1.18E-04	0
34	r_3369	0	2.18E-05	0 r_3441	0	1.14E-04	0
35	r_3370	0	2.18E-05	0 r_3442	0	1.14E-04	0
36	r_3371	0	2.18E-05	0 r_3443	0	1.14E-04	0
37	r_3372	0	1.18E-05	0 r_3444	3.59E-05	1.34E-04	0
38	r_3373	0	1.11E-05	0 r_3445	0	1.14E-04	0
39	r_3374	0	1.11E-05	0 r_3446	0	1.18E-04	0
40	r_3375	0	1.11E-05	0 r_3447	0	1.14E-04	0
41	r_3376	0	1.11E-05	0 r_3448	0	1.18E-04	0
42	r_3377	0	1.11E-05	0 r_3449	0	1.14E-04	0
43	r_3378	0	1.11E-05	0 r_3450	0	1.14E-04	0
44	r_3379	0	1.11E-05	0 r_3451	0	1.14E-04	0
45	r_3380	0	2.46E-05	0 r_3452	0	1.34E-04	0
46	r_3381	0	2.18E-05	0 r_3453	0	1.14E-04	0
47	r_3382	0	2.18E-05	0 r_3454	0	1.18E-04	0
48	r_3383	0	2.18E-05	0 r_3455	0	1.14E-04	0
49	r_3384	0	2.18E-05	0 r_3456	0	1.18E-04	0
50	r_3385	0	2.18E-05	0 r_3457	0	1.14E-04	0
51	r_3386	0	2.18E-05	0 r_3458	0	1.14E-04	0
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2	r_3387	0	2.18E-05	0 r_3459	0	1.14E-04	0
3	r_3388	0	1.18E-05	0 r_3460	0	1.34E-04	0
4	r_3389	0	1.11E-05	0 r_3461	0	1.14E-04	0
5	r_3390	0	1.11E-05	0 r_3462	0	1.18E-04	0
6	r_3391	0	1.11E-05	0 r_3463	0	1.14E-04	0
7	r_3392	0	1.11E-05	0 r_3464	0	1.18E-04	0
8	r_3393	0	1.11E-05	0 r_3465	0	1.14E-04	0
9	r_3394	0	1.11E-05	0 r_3466	0	1.14E-04	0
10	r_3395	0	1.11E-05	0 r_3467	0	1.14E-04	0
11	r_3396	0	1.23E-05	0 r_3468	0	1.34E-04	0
12	r_3397	0	1.16E-05	0 r_3469	0	1.14E-04	0
13	r_3398	0	1.16E-05	0 r_3470	0	1.18E-04	0
14	r_3399	0	1.16E-05	0 r_3471	0	1.14E-04	0
15	r_3400	0	1.16E-05	0 r_3472	0	1.18E-04	0
16	r_3401	0	1.16E-05	0 r_3473	0	1.14E-04	0
17	r_3402	0	1.16E-05	0 r_3474	0	1.14E-04	0
18	r_3403	0	1.16E-05	0 r_3475	0	1.14E-04	0
19	r_3404	0	7.96E-06	0 r_3476	0	1.34E-04	0
20	r_3405	0	7.64E-06	0 r_3477	0	1.14E-04	0
21	r_3406	0	7.64E-06	0 r_3478	0	1.18E-04	0
22	r_3407	0	7.64E-06	0 r_3479	0	1.14E-04	0
23	r_3408	0	7.64E-06	0 r_3480	0	1.18E-04	0
24	r_3409	0	7.64E-06	0 r_3481	0	1.14E-04	0
25	r_3410	0	7.64E-06	0 r_3482	0	1.14E-04	0
26	r_3411	0	7.64E-06	0 r_3483	0	1.14E-04	0
27	r_3412	0	8.21E-06	0 r_3484	0	1.34E-04	0
28	r_3413	0	7.87E-06	0 r_3485	0	1.14E-04	0
29	r_3414	0	7.87E-06	0 r_3486	0	1.18E-04	0
30	r_3415	0	7.87E-06	0 r_3487	0	1.14E-04	0
31	r_3416	0	7.87E-06	0 r_3488	0	1.18E-04	0
32	r_3417	0	7.87E-06	0 r_3489	0	1.14E-04	0
33	r_3418	0	7.87E-06	0 r_3490	0	1.14E-04	0
34	r_3419	0	7.87E-06	0 r_3491	0	1.14E-04	0
35	r_3420	0	6.02E-06	0 r_3492	0	1.34E-04	0
36	r_3421	0	5.83E-06	0 r_3493	0	1.14E-04	0
37	r_3422	0	5.83E-06	0 r_3494	0	1.18E-04	0
38	r_3423	0	5.83E-06	0 r_3495	0	1.14E-04	0
39	r_3424	0	5.83E-06	0 r_3496	0.00E+00	1.18E-04	0.00E+00
40	r_3425	0	5.83E-06	0 r_3497	0	1.14E-04	0
41	r_3426	0	5.83E-06	0 r_3498	0.00E+00	1.14E-04	0
42	r_3427	0	5.83E-06	0 r_3499	0	1.14E-04	0
43	r_3428	3.79E-05	9.91E-05	0 r_3500	0	1.34E-04	0
44	r_3429	0	5.84E-05	0 r_3501	0	1.14E-04	0
45	r_3430	0.00E+00	6.60E-05	0.00E+00 r_3502	0	0.000118	0
46	r_3431	0	5.84E-05	0 r_3503	0	0.000114	0
47	r_3432	0.00E+00	6.60E-05	0.00E+00 r_3504	0.00E+00	1.18E-04	0
48	r_3433	0	5.84E-05	0 r_3505	0	0.000114	0
49	r_3434	0	5.84E-05	0 r_3506	0	0.000114	0
50	r_3435	0	5.84E-05	0 r_3507	0	0.000114	0
51	r_3436	0	6.12E-05	0 r_1357	0	7.79E-06	0
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2	r_3437	0	4.22E-05	0	r_1358	0	1.51E-05	0
3	r_3438	0	4.62E-05	0	r_1359	3.95E-05	3.95E-05	2.59E-05
4	r_3439	0	4.22E-05	0	r_1360	0	0	0
5	r_3440	0.00E+00	4.62E-05	0.00E+00	r_1361	0	0	0
6	r_3441	0	4.22E-05	0	r_1362	0	0	0
7	r_3442	0	4.22E-05	0	r_1363	0	0	0
8	r_3443	0	4.22E-05	0	r_1364	0	0	0
9	r_3444	0	6.12E-05	0	r_1365	0	0	0
10	r_3445	0	4.22E-05	0	r_1366	0	0	0
11	r_3446	0	4.62E-05	0	r_1367	0	0	0
12	r_3447	0	4.22E-05	0	r_1368	0	0	0
13	r_3448	0	4.62E-05	0	r_1369	0	0	0
14	r_3449	0	4.22E-05	0	r_1370	0	0	0
15	r_3450	0	4.22E-05	0	r_1371	0	0	0
16	r_3451	0	4.22E-05	0	r_1449	0	7.43E-06	0
17	r_3452	0	6.12E-05	0	r_1450	0	6.80E-06	0
18	r_3453	0	4.22E-05	0	r_1451	0	6.85E-06	0
19	r_3454	0	4.62E-05	0	r_1452	0	6.31E-06	0
20	r_3455	0	4.22E-05	0	r_1453	0	8.12E-06	0
21	r_3456	0	4.62E-05	0	r_1454	0	7.37E-06	0
22	r_3457	0	4.22E-05	0	r_1455	0	7.43E-06	0
23	r_3458	0	4.22E-05	0	r_1456	0	6.80E-06	0
24	r_3459	0	4.22E-05	0	r_1457	0	6.35E-06	0
25	r_3460	0	6.12E-05	0	r_1458	0	5.89E-06	0
26	r_3461	0	4.22E-05	0	r_1459	0	0	0
27	r_3462	0	4.62E-05	0	r_1460	0	0	0
28	r_3463	0	4.22E-05	0	r_1461	0	0	0
29	r_3464	0	4.62E-05	0	r_1462	0	0	0
30	r_3465	0	4.22E-05	0	r_1463	0	0	0
31	r_3466	0	4.22E-05	0	r_1464	0	0	0
32	r_3467	0	4.22E-05	0	r_1465	0	0	0
33	r_3468	0	6.12E-05	0	r_1466	0	0	0
34	r_3469	0	4.22E-05	0	r_1467	0	0	0
35	r_3470	0	4.62E-05	0	r_1468	0	0	0
36	r_3471	0	4.22E-05	0	r_1469	0	0	0
37	r_3472	0	4.62E-05	0	r_1470	0	0	0
38	r_3473	0	4.22E-05	0	r_1471	0	0	0
39	r_3474	0	4.22E-05	0	r_1472	0	0	0
40	r_3475	0	4.22E-05	0	r_1473	0	0	0
41	r_3476	0	6.12E-05	0	r_1474	0	0	0
42	r_3477	0	4.22E-05	0	r_1475	0	0	0
43	r_3478	0	4.62E-05	0	r_1476	0	0	0
44	r_3479	0	4.22E-05	0	r_1477	0	0	0
45	r_3480	0	4.62E-05	0	r_1478	0	0	0
46	r_3481	0	4.22E-05	0	r_1479	4.08E-05	4.08E-05	0
47	r_3482	0	4.22E-05	0	r_1480	0	3.95E-05	0
48	r_3483	0.00E+00	4.22E-05	0.00E+00	r_1481	0	4.08E-05	0
49	r_3484	3.33E-05	6.12E-05	0	r_1482	0	3.95E-05	0
50	r_3485	0	4.22E-05	0	r_1483	0	4.08E-05	0
51	r_3486	0	4.62E-05	0	r_1484	0	3.95E-05	0
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2	r_3487	0	4.22E-05	0 r_1485	0	4.08E-05	0
3	r_3488	0	4.62E-05	0 r_1486	0	2.83E-05	0
4	r_3489	0	4.22E-05	0 r_1487	0	2.92E-05	0
5	r_3490	0	4.22E-05	0 r_1488	0	2.14E-05	0
6	r_3491	0	4.22E-05	0 r_1489	0	0	0
7	r_3492	0	6.12E-05	0 r_1490	0	0	0
8	r_3493	0	4.22E-05	0 r_1491	0	0	0
9	r_3494	0	4.62E-05	0 r_1492	0	0	0
10	r_3495	0	4.22E-05	0 r_1493	0	0	0
11	r_3496	0	4.62E-05	0 r_1494	0	0	0
12	r_3497	0	4.22E-05	0 r_1495	0	0	0
13	r_3498	0	4.22E-05	0 r_1496	0	0	0.00E+00
14	r_3499	0	4.22E-05	0 r_1497	0	0	0
15	r_3500	0	6.12E-05	0 r_1498	0	0	0
16	r_3501	0	4.22E-05	0 r_1499	0	0	0
17	r_3502	0	4.62E-05	0 r_1500	0	0	0
18	r_3503	0	4.22E-05	0 r_1501	0	0	0
19	r_3504	0	4.62E-05	0 r_1502	0.00E+00	0.00E+00	0.00E+00
20	r_3505	0	4.22E-05	0 r_1503	0	0	0
21	r_3506	0	4.22E-05	0 r_1504	0.00E+00	0.00E+00	0
22	r_3507	0	4.22E-05	0 r_1505	0	0	0
23	r_1357	0	2.19E-06	0 r_1506	0	0	0
24	r_1358	0	4.25E-06	0 r_1507	0	0	0
25	r_1359	3.67E-05	3.67E-05	3.29E-05 r_1508	0	0.00E+00	0
26	r_1360	0	0	0 r_1509	0	1.33E-05	0
27	r_1361	0.00E+00	0.00E+00	0.00E+00 r_1510	0	1.14E-05	0.00E+00
28	r_1362	0	0	0 r_1511	0	1.15E-05	0
29	r_1363	0.00E+00	0.00E+00	0.00E+00 r_1512	0.00E+00	1.01E-05	0
30	r_1364	0	0	0 r_1513	0	1.57E-05	0
31	r_1365	0	0	0 r_1514	0	1.31E-05	0
32	r_1366	0	0	0 r_1515	0	1.33E-05	0
33	r_1367	0	0	0 r_1516	0	1.14E-05	0
34	r_1368	0	0	0 r_1517	0	1.02E-05	0
35	r_1369	0	0	0 r_1518	0	9.05E-06	0
36	r_1370	0	0	0 r_1519	0	0	0
37	r_1371	0	0	0 r_1520	0	0	0
38	r_1372	0	0	0 r_1521	0	0	0
39	r_1373	0	0	0 r_1522	0	0	0
40	r_1374	0	0	0 r_1523	0	0	0
41	r_1375	0	0	0 r_1524	0	0	0
42	r_1376	0	0	0 r_1525	0	0	0
43	r_1377	0	0	0 r_1526	0	0	0
44	r_1378	0	0	0 r_1527	0	0	0
45	r_1379	0	0	0 r_1528	0	0	0
46	r_1380	0	0	0 r_1529	0	0	0
47	r_1381	0	0	0 r_1530	0	0	0
48	r_1382	0	0	0 r_1531	0	0	0
49	r_1383	0	0	0 r_1532	0	0	0
50	r_1384	0	0	0 r_1533	0	0	0
51	r_1385	0	0	0 r_1534	0	0	0

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2	r_1386	0	0	0 r_1535	0	0	0	
3	r_1387	0	0	-0.00011 r_1536	0	0	0	
4	r_1388	0	0	0 r_1537	0	0	0	
5	r_1389	0	0	0 r_1538	0	0	0	
6	r_1390	0	0	0 r_3963	0.000223	0.000223	0.000109	
7	r_1391	0	0	0 r_3964	0	0.000114	0	
8	r_1392	0	0	0 r_3965	0	0.000109	0	
9	r_1393	0	0	0 r_3966	0	5.56E-05	0	
10	r_1394	0	0	0 r_3967	0	0.000109	0	
11	r_1395	0	0	-0.00011 r_3968	0	5.56E-05	0	
12	r_1396	0	0.0001067	0 r_3969	0	5.43E-05	0	
13	r_1397	0	0	0 r_3970	0	3.68E-05	0	
14	r_1398	0	1000	-1000 r_3971	0	8.04E-05	0	
15	r_1399	0	0	0 r_3972	7.69E-05	7.69E-05	0	
16	r_1400	0	0	0 r_3974	0	3.63E-05	0	
17	r_1401	0.00E+00	0.00E+00	0.00E+00 r_3975	3.17E-05	3.17E-05	0	
18	r_1449	0	2.09E-06	0 r_3976	0	3.17E-05	0	
19	r_1450	0.00E+00	1.91E-06	0.00E+00 r_3977	0	2.82E-05	0	
20	r_1451	0	1.92E-06	0 r_3978	0	2.82E-05	0	
21	r_1452	0	1.77E-06	0 r_3979	5.64E-05	5.64E-05	0	
22	r_1453	0	2.28E-06	0 r_3980	0	5.64E-05	0	
23	r_1454	0.00E+00	2.07E-06	0.00E+00 r_3981	0	5.36E-05	0	
24	r_1455	0	2.09E-06	0 r_3982	0	5.36E-05	0	
25	r_1456	0.00E+00	1.91E-06	0.00E+00 r_3983	0	5.36E-05	0	
26	r_1457	0	1.79E-06	0 r_3984	0	5.36E-05	0	
27	r_1458	0	1.65E-06	0 r_3985	0	5.10E-05	0	
28	r_1459	0	0	0 r_3986	0	4.12E-05	0	
29	r_1460	0	0	0 r_3988	0.000409	0.000409	0.000106	
30	r_1461	0	0	0 r_3989	0	0.000114	0	
31	r_1462	0	0	0 r_3990	0	0.000288	0	
32	r_1463	0	0	0 r_3991	0	8.17E-05	0	
33	r_1464	0	0	0 r_3992	0	0.000288	0	
34	r_1465	0	0	0 r_3993	0	8.17E-05	0	
35	r_1466	0	0	0 r_3994	0	0.000144	0	
36	r_1467	0	0	0 r_3995	0	6.36E-05	0	
37	r_1468	0	0	0 r_3997	0.000102	0.000102	0	
38	r_1469	0	0	0 r_3998	0	0.000102	0	
39	r_1470	0	0.00E+00	0 r_3999	0	9.65E-05	0	
40	r_1471	0	0.00E+00	0 r_4000	0	6.84E-05	0	
41	r_1472	0	0.00E+00	0 r_4001	0	9.65E-05	0	
42	r_1473	0	0.00E+00	0 r_4002	0	6.84E-05	0	
43	r_1474	0	0.00E+00	0 r_4003	0	8.57E-05	0	
44	r_1475	0	0.00E+00	0 r_4004	0	4.89E-05	0	
45	r_1476	0	0.00E+00	0 r_4006	0.000118	1.18E-04	0	
46	r_1477	0	0.00E+00	0 r_4007	0	1.13E-04	0	
47	r_1478	0	0.00E+00	0 r_4008	0	1.14E-04	0	
48	r_1479	3.79E-05	3.79E-05	1.33E-05 r_4009	0	7.50E-05	0	
49	r_1480	0	2.25E-05	0 r_4010	0	1.13E-04	0	
50	r_1481	0	2.46E-05	0 r_4011	0	1.09E-04	0	
51	r_1482	0	1.18E-05	0 r_4012	0	7.50E-05	0	
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2	r_1483	0.00E+00	2.46E-05	0.00E+00	r_4013	0	5.59E-05
3	r_1484	0	1.18E-05	0	r_4014	0	0.000114
4	r_1485	0	1.23E-05	0	r_4015	0	7.50E-05
5	r_1486	0	7.96E-06	0	r_4016	0	5.70E-05
6	r_1487	0	8.21E-06	0	r_4017	0	4.52E-05
7	r_1488	0	6.02E-06	0	r_4018	0	7.50E-05
8	r_1489	0	0	0	r_4019	0	5.59E-05
9	r_1490	0	0	0	r_4020	0	4.52E-05
10	r_1491	0	0	0	r_4021	0	3.75E-05
11	r_1492	0	0	0	r_4022	0	0.000113
12	r_1493	0	0	0	r_4023	0	0.000109
13	r_1494	0	0	0	r_4024	0	7.50E-05
14	r_1495	0	0	0	r_4025	0	5.59E-05
15	r_1496	0	0	0	r_4026	0	0.000109
16	r_1497	0	0	0	r_4027	0	7.32E-05
17	r_1498	0	0	0	r_4028	0	5.59E-05
18	r_1499	0	0	0	r_4029	0	4.46E-05
19							
20	r_1500	0.00E+00	0.00E+00	0.00E+00	r_4030	0	7.50E-05
21	r_1501	0	0.00E+00	0	r_4031	0	5.59E-05
22	r_1502	0.00E+00	0.00E+00	0.00E+00	r_4032	0	4.52E-05
23	r_1503	0	0.00E+00	0	r_4033	0	3.75E-05
24	r_1504	0	0.00E+00	0	r_4034	0.00E+00	5.59E-05
25	r_1505	0	0.00E+00	0	r_4035	0	4.46E-05
26	r_1506	0	0.00E+00	0	r_4036	0	3.75E-05
27	r_1507	0	0.00E+00	0	r_4037	0	3.20E-05
28	r_1508	0	0.00E+00	0	r_1542	0	0.00E+00
29	r_1509	0	3.74E-06	0	r_1543	0.10753	1.08E-01
30	r_1510	0	3.21E-06	0	r_1545	0	0.00E+00
31	r_1511	0	3.24E-06	0	r_1546	0	1.35E-05
32	r_1512	0	2.84E-06	0	r_1547	0	6.27E-06
33	r_1513	0	4.41E-06	0	r_1548	0	3.32E-06
34	r_1514	0	3.68E-06	0	r_1549	0	8.59E-06
35	r_1515	0	3.74E-06	0	r_1550	0	6.00E-06
36	r_1516	0	3.21E-06	0	r_1551	0	0
37	r_1517	0	2.87E-06	0	r_1552	0	1.46E-05
38	r_1518	0	2.54E-06	0	r_1553	0	4.06E-06
39	r_1519	0	0	0	r_1554	0	0
40	r_1520	0	0	0	r_1560	0	8.54E-05
41	r_1521	0	0	0	r_1562	3.59E-05	0.000134
42	r_1522	0	0	0	r_1563	0	0
43	r_1523	0	0	0	r_1564	0	0
44	r_1524	0	0	0	r_1565	0	0
45	r_1525	0	0	0	r_1566	0	0.00E+00
46	r_1526	0	0	0	r_1567	-0.02504	-0.02436
47	r_1527	0	0	0	r_1568	0	0
48	r_1528	0	0	0	r_1572	0	6.04E-06
49	r_1529	0	0	0	r_1573	0	6.04E-06
50	r_1530	0	0.00E+00	0	r_1574	-0.02809	-0.02792
51	r_1531	0	0.00E+00	0	r_1575	0.00E+00	5.70E-06
52	r_1532	0	0.00E+00	0	r_1576	0	0.00E+00
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2	r_1533	0	0.00E+00	0	r_1577	0.00E+00	6.00E-06	0.00E+00
3	r_1534	0	0.00E+00	0	r_1578	0	6.00E-06	0
4	r_1535	0	0.00E+00	0	r_1579	0.00E+00	5.70E-06	0
5	r_1536	0	0.00E+00	0	r_1580	0	5.70E-06	0
6	r_1537	0	0.00E+00	0	r_1581	0	4.38E-06	0
7	r_1538	0	0.00E+00	0	r_1582	0	8.40E-06	0
8	r_3963	0.000207	2.07E-04	0.000175	r_1583	0	7.82E-06	0
9	r_3964	0	3.20E-05	0	r_1585	0.01826	1.83E-02	0.000454
10	r_3965	0	3.05E-05	0	r_1586	0	1.05E-05	0
11	r_3966	0	1.56E-05	0	r_1587	0	0	0
12	r_3967	0	3.05E-05	0	r_1588	0	1000	-1000
13	r_3968	0	1.56E-05	0	r_1589	0	4.15E-06	0
14	r_3969	0	1.53E-05	0	r_1590	0	0	-4.15E-06
15	r_3970	0	1.03E-05	0	r_1591	0	4.15E-06	0
16	r_3971	0	7.47E-05	0	r_1595	0.028086	0.028092	0.027402
17	r_3972	7.14E-05	7.14E-05	0	r_1596	-0.01826	1000	-0.01827
18	r_3974	0	1.33E-05	0	r_1597	0	0	-6.00E-06
19	r_3975	2.95E-05	2.95E-05	0	r_1598	0	6.44E-06	0
20	r_3976	0	2.95E-05	0	r_1599	0	6.44E-06	0
21	r_3977	0.00E+00	2.62E-05	0.00E+00	r_1600	0	6.09E-06	0
22	r_3978	0	2.06E-05	0	r_1601	0	0	0
23	r_3979	5.24E-05	5.24E-05	1.42E-05	r_1603	0	0	0
24	r_3980	0	3.20E-05	0	r_1604	0	5.43E-06	0
25	r_3981	0	3.63E-05	0	r_1605	0	5.43E-06	0
26	r_3982	0	1.70E-05	0	r_1606	0	0	0
27	r_3983	0.00E+00	3.63E-05	0.00E+00	r_1607	0	0	0
28	r_3984	0	1.70E-05	0	r_1608	0	0	0
29	r_3985	0	1.81E-05	0	r_1609	0	0	0
30	r_3986	0	1.16E-05	0	r_1610	0	0	0
31	r_3988	0.00038	3.80E-04	0.000295	r_1611	0	0	0
32	r_3989	0	3.20E-05	0	r_1613	0	0.000171	0
33	r_3990	0	8.11E-05	0	r_1614	0	0	0
34	r_3991	0	2.30E-05	0	r_1615	0	1.71E-04	0
35	r_3992	0	8.11E-05	0	r_1616	0	0	0
36	r_3993	0	2.30E-05	0	r_1617	0	1.71E-04	0
37	r_3994	0	4.05E-05	0	r_1618	0	1.71E-04	0
38	r_3995	0.00E+00	1.79E-05	0	r_1620	0	0.00E+00	0
39	r_3997	9.45E-05	9.45E-05	4.37E-05	r_1621	0	0.00E+00	0
40	r_3998	0.00E+00	3.20E-05	0.00E+00	r_1622	-7.58E-07	-7.58E-07	-7.58E-07
41	r_3999	0	4.82E-05	0	r_1623	0	1.71E-04	0
42	r_4000	0.00E+00	1.92E-05	0.00E+00	r_1624	0.00E+00	0.00E+00	0
43	r_4001	0.00E+00	4.82E-05	0.00E+00	r_1625	0	0.00E+00	0
44	r_4002	0.00E+00	1.92E-05	0	r_1627	0.00E+00	0.00E+00	0
45	r_4003	0	2.41E-05	0	r_1628	0	0.00E+00	0
46	r_4004	0.00E+00	1.37E-05	0.00E+00	r_1629	0	0.00E+00	0
47	r_4006	0.000109	1.09E-04	4.50E-05	r_1630	0	7.89E-06	0
48	r_4007	0	6.17E-05	0	r_1631	0.00E+00	1.86E-05	0
49	r_4008	0	3.20E-05	0	r_1632	-0.86761	0.00E+00	-1000
50	r_4009	0	2.11E-05	0	r_1633	0.00E+00	0.00E+00	-1.86E-05
51	r_4010	0	6.17E-05	0	r_1634	0	2.36E-05	0
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2	r_4011	0	3.08E-05	0 r_1635	0	0.00E+00	0
3	r_4012	0	2.11E-05	0 r_1637	0	0.00E+00	0
4	r_4013	0	1.57E-05	0 r_1638	0	4.34E-05	0
5	r_4014	0	3.20E-05	0 r_1639	0	0	0
6	r_4015	0	2.11E-05	0 r_1640	0	0	0
7	r_4016	0	1.60E-05	0 r_1641	0	4.04E-06	0
8	r_4017	0	1.27E-05	0 r_1642	0	0	-5.26E-05
9	r_4018	0	2.11E-05	0 r_1643	0	0.00E+00	0
10	r_4019	0.00E+00	1.57E-05	0.00E+00 r_1644	0	0	-0.00017
11	r_4020	0	1.27E-05	0 r_1645	0	0.00E+00	-0.00017
12	r_4021	0.00E+00	1.05E-05	0.00E+00 r_1647	0	0	-3.55E-05
13	r_4022	0	6.17E-05	0 r_1648	0	0	0
14	r_4023	0	3.08E-05	0 r_1649	0	0.00E+00	0
15	r_4024	0	2.11E-05	0 r_1650	0	3.45E-06	0
16	r_4025	0	1.57E-05	0 r_1651	0	6.73E-06	0
17	r_4026	0	3.08E-05	0 r_1652	0	1.00E+03	-1000
18	r_4027	0	2.06E-05	0.00E+00 r_1654	-0.52975	-5.30E-01	-0.52982
19	r_4028	0	1.57E-05	0 r_1656	0	0.00E+00	0
20	r_4029	0	1.25E-05	0 r_1658	0	0	0
21	r_4030	0	2.11E-05	0 r_1659	0	1.07E-05	-3.55E-05
22	r_4031	0	1.57E-05	0 r_1660	0	0.000171	0
23	r_4032	0	1.27E-05	0 r_1661	0	1.71E-04	0
24	r_4033	0	1.05E-05	0 r_1663	0	1.995015	0
25	r_4034	0	1.57E-05	0 r_1664	0	0	0
26	r_4035	0	1.25E-05	0 r_1665	0	1.00E+03	-1000
27	r_4036	0	1.05E-05	0 r_1667	2.27E-01	1.00E+03	-1000
28	r_4037	0	9.00E-06	0 r_1668	0	1.995015	0
29	r_1542	0	0.00E+00	0 r_1669	0	1.00E+03	-1000
30	r_1543	0.09984	9.98E-02	0.09984 r_1671	0	0.00E+00	0
31	r_1545	0	0.00E+00	0 r_1672	1.994986	2.00E+00	0
32	r_1546	0	3.78E-06	0 r_1673	0	4.34E-05	0
33	r_1547	0	1.76E-06	0 r_1674	0	4.34E-05	0
34	r_1548	0	9.33E-07	0 r_1675	0	0.00E+00	0
35	r_1549	0	2.41E-06	0 r_1676	-4.08E-05	0.00E+00	-0.00017
36	r_1550	0	1.69E-06	0 r_1677	0	0	-0.00013
37	r_1551	0.00E+00	0.00E+00	0.00E+00 r_1678	0	0	-0.00013
38	r_1552	0	4.10E-06	0 r_1679	0	0.00E+00	-0.00013
39	r_1553	0	1.14E-06	0 r_1680	0	0.00E+00	-0.00013
40	r_1554	0	0.00E+00	0 r_1681	0	0	-0.00013
41	r_1560	0	2.40E-05	0 r_1682	0.000619	6.24E-04	0.000576
42	r_1562	3.33E-05	6.12E-05	0 r_1683	0	0.00E+00	0
43	r_1563	0	0.00E+00	0 r_1684	0	1.14E-04	0
44	r_1564	0	0.00E+00	0 r_1685	0.00E+00	0.00E+00	0
45	r_1565	0	0.00E+00	0 r_1686	0	0.00E+00	-9.42E-06
46	r_1566	0	0.00E+00	0 r_1687	0.00E+00	9.42E-06	0.00E+00
47	r_1567	-0.03838	-3.82E-02	-0.03838 r_1688	0	0.00E+00	-1.07E-05
48	r_1568	0	0.00E+00	-9.33E-07 r_1689	0	4.61E-05	-1.02E-05
49	r_1572	0	1.70E-06	0 r_1690	0	4.56E-05	0
50	r_1573	0	1.70E-06	0 r_1691	-4.08E-05	-3.95E-05	-4.25E-05
51	r_1574	-0.02608	-0.026032	-0.02608 r_1694	0	1.00E+03	-1000

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2	r_1575	0.00E+00	1.60E-06	0.00E+00	r_1695	0	0	-1.07E-05
3	r_1576	0	0.00E+00	-1.60E-06	r_1696	-0.97283	-0.97216	-0.97353
4	r_1577	0	1.69E-06	0	r_1697	1.994986	1.995015	1.994901
5	r_1578	0	1.69E-06	0	r_1698	-4.08E-05	-3.95E-05	-0.00014
6	r_1579	0	1.60E-06	0	r_1699	0	0.00E+00	0
7	r_1580	0.00E+00	1.60E-06	0.00E+00	r_1700	0	6.21E-05	0
8	r_1581	0	1.23E-06	0	r_1701	3.95E-05	3.95E-05	3.95E-05
9	r_1582	0	2.36E-06	0	r_1702	0	0.00E+00	0
10	r_1583	0.00E+00	2.20E-06	0.00E+00	r_1703	0	0.000171	0
11	r_1585	0.016954	0.0169554	0.000533	r_1704	-0.00057	-3.04E-04	-0.00057
12	r_1586	0	2.96E-06	0	r_1705	0	0.00E+00	0
13	r_1587	0	0.00E+00	0	r_1706	0	0	0
14	r_1588	0	1000	-1000	r_1707	0	0.00E+00	0
15	r_1589	0	1.17E-06	0	r_1708	0.025044	0.025049	0.02436
16	r_1590	0	0	-1.17E-06	r_1709	0	0	0
17	r_1591	0	1.17E-06	0	r_1710	0	0	0
18	r_1595	0.026077	0.0260791	0.025885	r_1711	0	0	0
19	r_1596	-0.01695	1000	-1.70E-02	r_1712	0	0	0
20	r_1597	0	0.00E+00	-1.69E-06	r_1713	0	0	-6.73E-06
21	r_1598	0	1.81E-06	0	r_1714	-1	-0.99999	-1.00E+00
22	r_1599	0	1.81E-06	0	r_1715	0	0.00E+00	0
23	r_1600	0	1.71E-06	0	r_1716	0	0.00E+00	0
24	r_1601	0	0	0.00E+00	r_1717	0	0	0
25	r_1603	0	0.00E+00	0	r_1718	0	0.00E+00	0
26	r_1604	0	1.52E-06	0	r_1719	0	0	0.00E+00
27	r_1605	0	1.52E-06	0	r_1720	0	0.00E+00	0.00E+00
28	r_1606	0	0.00E+00	0	r_1721	0	0.00E+00	0
29	r_1607	0	0.00E+00	0	r_1722	0	4.95E-05	0
30	r_1608	0	0.00E+00	0	r_1723	0	0.00E+00	0
31	r_1609	0	0.00E+00	0	r_1724	0	6.98E-05	0
32	r_1610	0	0	0	r_1725	0	0.00E+00	0
33	r_1611	0	0.00E+00	0	r_1726	0	0.00E+00	0
34	r_1613	0	4.80E-05	0	r_1727	0	2.24E-06	0
35	r_1614	0	0	0	r_1728	0	0.00E+00	0
36	r_1615	0	4.80E-05	0	r_1729	-0.00034	-0.00034	-0.00034
37	r_1616	0	0	0.00E+00	r_1730	0	0	0
38	r_1617	0	4.80E-05	0	r_1731	0	0.00E+00	0
39	r_1618	0	4.80E-05	0	r_1732	0	0	0.00E+00
40	r_1620	0	0	0	r_1733	0	0.00E+00	0
41	r_1622	-7.04E-07	-7.04E-07	-7.04E-07	r_1734	0	0.000171	0
42	r_1623	0	4.80E-05	0	r_1735	0	0	0
43	r_1624	0	0.00E+00	0	r_1736	0	5.26E-05	0.00E+00
44	r_1625	0	0.00E+00	0	r_1737	0	0.00E+00	0
45	r_1627	0	0	0	r_1738	0	0.00E+00	0
46	r_1628	0.00E+00	0.00E+00	0.00E+00	r_1739	0.00E+00	0.00E+00	0
47	r_1629	0	0.00E+00	0	r_1743	0	0	0
48	r_1630	0	2.22E-06	0	r_1744	0.00E+00	0.00E+00	0
49	r_1631	0	5.22E-06	0	r_1745	0	0.00E+00	0
50	r_1632	0	0	-1000	r_1746	0	3.86E+00	-0.00122
51	r_1633	0	0	-5.22E-06	r_1747	0	0	-9.77E-05
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2	r_1634	0	6.62E-06	0 r_1748	-7.66E-02	-7.66E-02	-0.07655
3	r_1635	0	0	0 r_1749	0	3.56E-06	0
4	r_1637	0	0	0 r_1750	0	0	-3.56E-06
5	r_1638	0	1.24E-05	0 r_1751	0	0	-9.77E-05
6	r_1639	0	0	0 r_1752	0	9.77E-05	0
7	r_1640	0	0.00E+00	0 r_1753	0	8.26E-07	0
8	r_1641	0	1.13E-06	0 r_1754	0.000608	0.000612	0.000608
9	r_1642	0	0.00E+00	-1.48E-05 r_1757	0	8.18E-07	0
10	r_1643	0	0.00E+00	0 r_1758	0.000608	1000	-1000
11	r_1644	0	0	-4.80E-05 r_1759	0	0	-9.77E-05
12	r_1645	0	0	-4.80E-05 r_1760	0	1000	-1000
13	r_1647	0	0.00E+00	-9.97E-06 r_1761	0	1.60E-05	0
14	r_1648	0	0	0 r_1762	0	1.60E-05	0
15	r_1649	0	0	0 r_1763	-8.68E-01	0.00E+00	-1.00E+03
16	r_1650	0	9.69E-07	0 r_1764	0	0	0
17	r_1651	0	1.89E-06	0 r_1765	0.00E+00	8.67E-06	0.00E+00
18	r_1652	0	1000	-1000 r_1766	9.48E-08	9.48E-08	9.48E-08
19	r_1654	-0.59774	-5.98E-01	-0.59775 r_1770	0	0	-2.24E-06
20	r_1656	0	0.00E+00	0 r_1771	0	0	-6.21E-05
21	r_1658	0.00E+00	0.00E+00	0.00E+00 r_1772	0.00E+00	3.84E-05	-6.21E-05
22	r_1659	0	3.01E-06	-9.97E-06 r_1774	0	4.52E-05	-6.21E-05
23	r_1660	0	4.80E-05	0 r_1775	0	5.07E-06	-6.21E-05
24	r_1661	0	4.80E-05	0 r_1776	0	0	-2.56E-06
25	r_1663	0	1.9638127	0 r_1777	0	0	-1.80E-06
26	r_1664	0	0.00E+00	0 r_1788	0	8.26E-07	0
27	r_1665	0	1000	-1000 r_1790	0	0	0
28	r_1667	0.21064	1000	-1000 r_1791	0	0	0
29	r_1668	0	1.96E+00	0 r_1792	0	0.00E+00	0
30	r_1669	0	1000	-1.00E+03 r_1793	0	0.000114	0
31	r_1671	0	0	0 r_1794	0	0.000342	0
32	r_1672	1.963804	1.9638127	0.00E+00 r_1795	0	0.00E+00	-0.00011
33	r_1673	0	1.24E-05	0.00E+00 r_1796	0	0	-1.46E-05
34	r_1674	0	1.24E-05	0.00E+00 r_1797	0	0	0
35	r_1675	0	0	0 r_1798	0.00E+00	1.46E-05	0
36	r_1676	-3.79E-05	-1.33E-05	-9.91E-05 r_1800	0	0	0
37	r_1677	0	0.00E+00	-6.12E-05 r_1801	4.08E-05	4.24E-05	3.43E-05
38	r_1678	0	0.00E+00	-6.12E-05 r_1802	0	0	0
39	r_1679	0	0	-6.12E-05 r_1803	4.08E-05	4.24E-05	3.43E-05
40	r_1680	0.00E+00	0.00E+00	-6.12E-05 r_1805	0	0.00E+00	-0.00012
41	r_1681	0	0	-6.12E-05 r_1806	0	0.00E+00	0
42	r_1682	5.75E-04	5.78E-04	5.63E-04 r_1807	0	0	0
43	r_1683	0	0.00E+00	0.00E+00 r_1808	0.00E+00	1.20E-05	0
44	r_1684	0	4.22E-05	0 r_1809	0	3.863538	-0.00122
45	r_1685	0	0.00E+00	0 r_1810	0	2.76E-05	0
46	r_1686	0	0	-2.65E-06 r_1811	1.161054	1.16E+00	1.16E+00
47	r_1687	0	2.65E-06	0 r_1812	0	0	0
48	r_1688	0	0	-3.01E-06 r_1813	0	0	0
49	r_1689	0	1.33E-05	-2.87E-06 r_1814	0	0	0
50	r_1690	0	1.28E-05	0 r_1815	0	3.45E-05	0.00E+00
51	r_1691	-3.79E-05	-3.72E-05	-3.84E-05 r_1816	0	3.45E-05	0

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2	r_1694	0	1000	-1000	r_1817	0	3.55E-05	0
3	r_1695	0	0	-3.01E-06	r_1818	0	7.89E-06	0
4	r_1696	-0.93273	-9.33E-01	-0.93293	r_1819	0	0	0
5	r_1697	1.963804	1.96E+00	1.963781	r_1820	0	0	0
6	r_1698	-3.79E-05	-3.72E-05	-6.54E-05	r_1821	0	0.000171	0
7	r_1699	0.00E+00	0.00E+00	0.00E+00	r_1822	0	0.00E+00	0
8	r_1700	0	1.75E-05	0.00E+00	r_1823	0	0.00E+00	0
9	r_1701	3.67E-05	3.67E-05	3.67E-05	r_1824	-0.29398	1000	-1000
10	r_1702	0.00E+00	0.00E+00	0.00E+00	r_1825	-0.07522	-0.07513	-0.07539
11	r_1703	0	4.80E-05	0.00E+00	r_1826	0	0	-0.00034
12	r_1704	-5.27E-04	-4.29E-04	-5.29E-04	r_1827	0.00E+00	1.64E-04	-9.77E-05
13	r_1705	0	0	0	r_1829	0	1000	-1000
14	r_1706	0	0	0	r_1830	0	1.02E-05	-6.21E-05
15	r_1707	0.00E+00	0.00E+00	0.00E+00	r_1831	0	1000	-0.00034
16	r_1708	0.038377	0.0383784	0.038185	r_1832	0.218767	2.21385	0.218386
17	r_1709	0	0	0.00E+00	r_1833	0	9.77E-05	0
18	r_1710	0	0.00E+00	0	r_1834	0	0	0
19	r_1711	0	0	0.00E+00	r_1835	0	0	-1.63E-06
20	r_1712	0	0.00E+00	0.00E+00	r_1836	0	0	-1.61E-06
21	r_1713	0	0.00E+00	-1.89E-06	r_1837	0	0.00E+00	0
22	r_1714	-1.00E+00	-1.00E+00	-1.00E+00	r_1839	0	0	0.00E+00
23	r_1715	0	0	0	r_1840	-0.00389	-3.85E-03	-3.92E-03
24	r_1716	0	0	0.00E+00	r_1841	0	8.38E-06	0
25	r_1717	0.00E+00	0.00E+00	0.00E+00	r_1842	0	0.00E+00	-8.38E-06
26	r_1718	0	0	0	r_1843	0	3.44E-06	0
27	r_1719	0.00E+00	0.00E+00	0.00E+00	r_1844	0.00E+00	3.33E-06	0.00E+00
28	r_1720	0	0	0	r_1845	0	3.44E-06	0
29	r_1721	0	0.00E+00	0	r_1846	0	0	0
30	r_1722	0.00E+00	1.39E-05	0.00E+00	r_1847	0	0.00E+00	0
31	r_1723	0	0	0	r_1848	0	0	0
32	r_1724	0	1.96E-05	0	r_1849	0.00E+00	0.00E+00	-8.54E-05
33	r_1725	0.00E+00	0.00E+00	0.00E+00	r_1850	0	1.71E-04	0.00E+00
34	r_1726	0	0	0	r_1851	0	0.000134	0
35	r_1727	0	6.30E-07	0	r_1852	0.00E+00	1.34E-04	0
36	r_1728	0	0	0	r_1853	3.59E-05	0.000134	0
37	r_1729	-0.00032	-0.000317	-0.00032	r_1854	0	0.000134	0
38	r_1730	0	0	0	r_1855	0	0.000134	0
39	r_1731	0	0	0	r_1856	0	0.000134	0
40	r_1732	0	0	0	r_1857	0	0.000134	0
41	r_1733	0	0	0	r_1858	0	0.000134	0
42	r_1734	0	4.80E-05	0.00E+00	r_1859	0	0.000134	0
43	r_1735	0	0	0	r_1860	0	0.000134	0
44	r_1736	0	1.48E-05	0	r_1861	-9.48E-08	-9.48E-08	-9.48E-08
45	r_1737	0	0	0	r_1862	0	4.61E-06	0.00E+00
46	r_1738	0	0	0	r_1863	0	6.09E-06	0
47	r_1739	0.00E+00	0.00E+00	0.00E+00	r_1864	0	0	-6.09E-06
48	r_1743	0	0	0	r_1865	0	6.09E-06	0
49	r_1744	0	0	0	r_1866	0.00E+00	7.82E-06	0
50	r_1745	0	0	0	r_1867	0	5.54E-06	0
51	r_1746	-0.00084	3.81E+00	-0.00093	r_1868	0	7.82E-06	0
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2	r_1747	0	0	-2.74E-05	r_1869	0	0	-7.82E-06
3	r_1748	-0.07108	-7.11E-02	-0.07108	r_1870	0	8.40E-06	0
4	r_1749	0	1.00E-06	0	r_1871	0	1.00E+03	0
5	r_1750	0	0	-1.00E-06	r_1872	0	0	0
6	r_1751	0	0.00E+00	-2.74E-05	r_1873	0	1.53E-05	0
7	r_1752	0	2.74E-05	0	r_1874	0	0.000684	0
8	r_1753	0	2.32E-07	0	r_1875	0	0	0
9	r_1754	0.000564	0.0005674	0.000564	r_1876	0	0.00E+00	0
10	r_1757	0	2.30E-07	0	r_1877	0	0	0
11	r_1758	0.000564	1000	-1000	r_1878	0	0	0
12	r_1759	0	0	-2.74E-05	r_1879	0.00E+00	6.10E-06	0
13	r_1760	0	1.00E+03	-1000	r_1880	0	1.15E-05	0
14	r_1761	0	4.49E-06	0	r_1881	0	1.41E-05	0
15	r_1762	0	4.49E-06	0	r_1882	0	0.000131	0
16	r_1763	0	0	-1000	r_1883	0.00E+00	8.06E-06	0
17	r_1764	0	0	0	r_1884	0	0	0
18	r_1765	0	2.44E-06	0	r_1885	0	0.00E+00	0
19	r_1766	8.80E-08	8.80E-08	8.80E-08	r_1886	0	0	0.00E+00
20	r_1770	0	0	-6.30E-07	r_1887	0.015606	0.01571	0.015606
21	r_1771	0	0	-1.75E-05	r_1889	0.00E+00	9.42E-06	0.00E+00
22	r_1772	0	1.08E-05	-1.75E-05	r_1890	0	0	0
23	r_1774	0	1.33E-05	-1.75E-05	r_1891	0	8.92E-06	0
24	r_1775	0	1.43E-06	-1.75E-05	r_1892	0	0	0
25	r_1776	0.00E+00	0.00E+00	-7.19E-07	r_1893	0	6.13E-06	0.00E+00
26	r_1777	0	0	-5.05E-07	r_1895	0	0	-1.03E-05
27	r_1788	0	2.32E-07	0.00E+00	r_1896	0	1.03E-05	0
28	r_1790	0	0.00E+00	0	r_1897	0	5.61E-06	0
29	r_1791	0	0.00E+00	0	r_1898	0	1000	0.00E+00
30	r_1792	0	0	0	r_1899	0	6.00E-06	0.00E+00
31	r_1793	0	3.20E-05	0	r_1900	0	5.57E-06	0
32	r_1794	0	9.61E-05	0	r_1901	0	1.00E+03	-1000
33	r_1795	0	0	-3.20E-05	r_1902	0	4.95E-06	0
34	r_1796	0	0	-4.10E-06	r_1903	0	4.10E-06	0
35	r_1797	0	0.00E+00	0	r_1904	0	7.50E-06	0
36	r_1798	0	4.10E-06	0	r_1905	0	0.000104	0.00E+00
37	r_1800	0	0	0	r_1906	0.00E+00	1.60E-05	0
38	r_1801	3.79E-05	3.84E-05	3.61E-05	r_1907	4.08E-05	4.25E-05	3.95E-05
39	r_1802	0	0.00E+00	0	r_1908	0	0.00E+00	0
40	r_1803	3.79E-05	3.84E-05	3.61E-05	r_1909	0	0	0.00E+00
41	r_1805	0.00E+00	0.00E+00	-3.49E-05	r_1910	0	0	0
42	r_1806	0	0	0.00E+00	r_1911	0	9.71E-06	0
43	r_1807	0	0.00E+00	0.00E+00	r_1912	0	3.31E-06	0.00E+00
44	r_1808	0.00E+00	3.38E-06	0.00E+00	r_1913	0	4.30E-06	0.00E+00
45	r_1809	-0.00084	3.81E+00	-9.31E-04	r_1914	0	7.66E-06	0.00E+00
46	r_1810	0.00E+00	7.75E-06	0.00E+00	r_1915	0.00E+00	9.53E-07	0.00E+00
47	r_1811	1.136965	1.1370377	1.14E+00	r_1916	0.00E+00	2.00E-06	0.00E+00
48	r_1812	0	0.00E+00	0	r_1919	0	0.00E+00	0.00E+00
49	r_1813	0	0	0	r_1920	0	0	0.00E+00
50	r_1814	0	0	0	r_1921	0	0	0.00E+00
51	r_1815	0	9.70E-06	0	r_1922	0	0.00E+00	0

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2	r_1816	0	9.70E-06	0	r_1923	0	0	0
3	r_1817	0	9.97E-06	0	r_1924	0	0	0
4	r_1818	0	2.22E-06	0.00E+00	r_1925	0	0	0
5	r_1819	0	0	0.00E+00	r_1926	0.00E+00	0.00E+00	0
6	r_1820	0	0	0	r_1927	0	0	0
7	r_1821	0	4.80E-05	0	r_1928	0.00E+00	0.00E+00	0
8	r_1822	0	0	0	r_1929	0.00E+00	0.00E+00	0.00E+00
9	r_1823	0.00E+00	0.00E+00	0.00E+00	r_1930	0.00E+00	9.10E-05	0
10	r_1824	-0.34858	1000	-1000	r_1931	0	0.00E+00	0
11	r_1825	-6.98E-02	-6.98E-02	-6.99E-02	r_1932	-0.07655	-0.07655	-0.07655
12	r_1826	0.00E+00	0.00E+00	-9.61E-05	r_1935	0	0.00E+00	0.00E+00
13	r_1827	0	4.61E-05	-2.74E-05	r_1936	0	6.84E-05	0
14	r_1829	0.00E+00	1.00E+03	-1.00E+03	r_1937	0	0.00E+00	0.00E+00
15	r_1830	0	2.87E-06	-1.75E-05	r_1938	0.00E+00	0.00E+00	0
16	r_1831	0	1000	-9.61E-05	r_1939	0	0	0
17	r_1832	0.23337	2.20E+00	0.233262	r_1940	0.00E+00	0.00E+00	0
18	r_1833	0	2.74E-05	0	r_1941	0.00E+00	0.00E+00	0
19	r_1834	0	0	0	r_1942	0	0	0
20	r_1835	0	0	-4.59E-07	r_1943	0	0.00E+00	0
21	r_1836	0	0	-4.53E-07	r_1944	0	0	0
22	r_1837	0	0.00E+00	0	r_1945	0	0	0
23	r_1839	0	0.00E+00	0	r_1946	0	0	0
24	r_1840	-0.00362	-3.60E-03	-0.00364	r_1947	0	0	0
25	r_1841	0	2.35E-06	0	r_1952	0	1.98E-06	0
26	r_1842	0	0	-2.35E-06	r_1963	-0.0013	-1.30E-03	-0.00139
27	r_1843	0	9.65E-07	0	r_1964	0.001297	1.39E-03	0.001296
28	r_1844	0	9.37E-07	0	r_1965	-0.58053	-5.80E-01	-0.59835
29	r_1845	0	9.65E-07	0	r_1966	0	0	0
30	r_1846	0	0	0	r_1967	0	0	0
31	r_1847	0	0	0	r_1968	0	0	0
32	r_1848	0	0	0	r_1970	0.00E+00	0.00E+00	0
33	r_1849	0	0	-2.40E-05	r_1971	0.00E+00	0.00E+00	0
34	r_1850	0	4.80E-05	0.00E+00	r_1972	0.00E+00	0.00E+00	0
35	r_1851	0	6.12E-05	0	r_1974	0.00E+00	1.71E-04	0.00E+00
36	r_1852	0	6.12E-05	0.00E+00	r_1975	0.00E+00	1.71E-04	0
37	r_1853	0	6.12E-05	0	r_1976	0.00E+00	1.31E-04	0.00E+00
38	r_1854	0	6.12E-05	0	r_1977	0.000649	0.000737	0.000649
39	r_1855	0	6.12E-05	0	r_1978	1.936979	1.94E+00	1.94E+00
40	r_1856	0	6.12E-05	0	r_1979	1.95E+00	1.95E+00	1.944987
41	r_1857	0	6.12E-05	0.00E+00	r_1980	0	3.07E-05	0
42	r_1858	0	6.12E-05	0.00E+00	r_1981	0.00E+00	0.00E+00	-1.44E-06
43	r_1859	3.33E-05	6.12E-05	0	r_1984	0	2.56E-06	0
44	r_1860	0	6.12E-05	0	r_1987	0.00E+00	7.50E-06	0.00E+00
45	r_1861	-8.80E-08	0.0001066	-8.80E-08	r_1988	0.00E+00	1.68E-05	0.00E+00
46	r_1862	0	1.30E-06	0	r_1989	0	1.68E-05	0
47	r_1863	0	1.71E-06	0.00E+00	r_1990	0.00E+00	0.00E+00	0
48	r_1864	0	0.00E+00	-1.71E-06	r_1991	0	0	-3.07E-05
49	r_1865	0	1.71E-06	0	r_1992	-1.95E+00	-1.94E+00	-1.94511
50	r_1866	0	2.20E-06	0	r_1993	0.00E+00	1.63E-06	0.00E+00
51	r_1867	0.00E+00	1.56E-06	0.00E+00	r_1994	0	1.61E-06	0
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2	r_1868	0	2.20E-06	0 r_1995	4.08E-05	4.25E-05	3.95E-05
3	r_1869	0	0	-2.20E-06 r_1996	0	0.00E+00	-5.26E-05
4	r_1870	0	2.36E-06	0.00E+00 r_1997	0	0	0
5	r_1871	0.00E+00	1.00E+03	0.00E+00 r_1998	0.00E+00	0.00E+00	-4.04E-06
6	r_1872	0	0.00E+00	0 r_1999	0	0	0
7	r_1873	0	4.31E-06	0 r_2000	0	3.40E-06	0.00E+00
8	r_1874	0	1.92E-04	0 r_2001	0.00E+00	4.30E-06	0.00E+00
9	r_1875	0	0.00E+00	0 r_2002	0	4.30E-06	0
10	r_1876	0	0.00E+00	0 r_2003	0	4.15E-06	0
11	r_1877	0	0.00E+00	0 r_2004	0	0	0
12	r_1878	0	0.00E+00	0 r_2005	-0.07522	-0.0752	-0.07523
13	r_1879	0	1.72E-06	0 r_2008	0	0	0
14	r_1880	0	3.22E-06	0 r_2020	0	0	0
15	r_1881	0	3.95E-06	0 r_2022	9.48E-08	9.48E-08	9.48E-08
16	r_1882	0	3.69E-05	0.00E+00 r_2023	0	0	0
17	r_1883	0	1.36E-07	0 r_2024	0.00E+00	7.50E-06	0
18	r_1884	0.00E+00	0.00E+00	0.00E+00 r_2025	0	0	0
19	r_1885	0	0	0.00E+00 r_2026	0	1.71E-04	0.00E+00
20	r_1886	0	0.00E+00	0 r_2027	0	1.71E-04	0
21	r_1887	0.01449	1.45E-02	0.01449 r_2028	0	0.00E+00	0
22	r_1889	0	2.65E-06	0 r_2030	9.38E-05	9.38E-05	9.38E-05
23	r_1890	0	0.00E+00	0 r_2031	0	9.77E-05	-0.00017
24	r_1891	0	2.51E-06	0.00E+00 r_2032	0.813375	8.14E-01	0.812685
25	r_1892	0.00E+00	0.00E+00	0.00E+00 r_2033	0	1.86E-05	0
26	r_1893	0	1.72E-06	0 r_2036	0	0.00E+00	0
27	r_1895	0	0	-2.89E-06 r_2037	0	3.07E-05	0.00E+00
28	r_1896	0	2.89E-06	0 r_2038	0	0.00E+00	0
29	r_1897	0	1.58E-06	0 r_2039	0	0	0
30	r_1898	0	1000	0 r_2040	0	0	0
31	r_1899	0	1.69E-06	0 r_2041	0	0.00E+00	0
32	r_1900	0	1.56E-06	0 r_2042	0	0	0
33	r_1901	0	1000	-1000 r_2043	0	0	0
34	r_1902	0	1.31E-07	0 r_2044	0	0	0
35	r_1903	0	1.15E-06	0 r_2045	-0.58053	-0.5802	-0.58065
36	r_1904	0	2.11E-06	0 r_2046	0	3.09E-06	0
37	r_1905	0	2.91E-05	0 r_2049	0	0.00E+00	0
38	r_1906	0	4.51E-06	0 r_2050	0	0.00E+00	0
39	r_1907	3.79E-05	3.84E-05	3.72E-05 r_2051	0	3.62E-06	0
40	r_1908	0	0	0 r_2052	0	2.38E-06	0
41	r_1909	0	0	0 r_2053	0.000649	6.53E-04	0.000649
42	r_1910	0	0	0 r_2054	0.000649	0.000653	0.000649
43	r_1911	0	2.73E-06	0 r_2055	0	1.44E-06	0
44	r_1912	0	9.29E-07	0 r_2056	0	1.29E-05	0.00E+00
45	r_1913	0.00E+00	1.21E-06	0.00E+00 r_2057	0	0	-1.29E-05
46	r_1914	0	2.15E-06	0 r_2058	0	0.00E+00	0
47	r_1915	0	2.68E-07	0 r_2060	-0.00732	-0.00732	-0.00737
48	r_1916	0	5.61E-07	0.00E+00 r_2061	0.00E+00	4.33E-05	0
49	r_1919	0	0.00E+00	0 r_2062	0	0	0
50	r_1920	0	0.00E+00	0 r_2063	0.00E+00	9.77E-05	0
51	r_1921	0	0	0 r_2064	0.00E+00	6.21E-05	0.00E+00

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2	r_1922	0	0.00E+00	0	r_2065	0.00E+00	6.21E-05	0
3	r_1923	0	0.00E+00	0	r_2066	0	0.00E+00	0
4	r_1924	0	0	0	r_2067	0	0	0
5	r_1925	0	0.00E+00	0	r_2068	0	0.00E+00	0
6	r_1926	0	0.00E+00	0	r_2069	0	0.00E+00	0
7	r_1927	0	0.00E+00	0	r_2070	0	0	0
8	r_1928	0	0.00E+00	0	r_2071	0.00E+00	0.00E+00	0
9	r_1929	0	0.00E+00	0	r_2072	0	1.78E-02	0
10	r_1930	0.00E+00	2.65E-05	0.00E+00	r_2073	0	0.00E+00	0
11	r_1931	0	0	0	r_2074	0	0.000171	0
12	r_1932	-0.07108	-0.071079	-0.07108	r_2075	0	0.00E+00	0
13	r_1935	0.00E+00	0.00E+00	0.00E+00	r_2080	0	6.21E-05	0.00E+00
14	r_1936	0	1.92E-05	0	r_2082	0	0	0
15	r_1937	0	0.00E+00	0	r_2083	0	3.33E-06	0
16	r_1938	0	0.00E+00	0	r_2084	0.00E+00	3.33E-06	0
17	r_1939	0	0.00E+00	0	r_2085	0.00E+00	0.00E+00	-3.33E-06
18	r_1940	0	0.00E+00	0	r_2086	0.00E+00	0.00E+00	0.00E+00
19	r_1941	0	0.00E+00	0	r_2087	0.00E+00	0.00E+00	0
20	r_1942	0	0	0	r_2089	0.00E+00	0.00E+00	0
21	r_1943	0	0	0	r_2090	0.00E+00	0.00E+00	0
22	r_1944	0	0	0	r_2091	0.00E+00	3.29E-05	0
23	r_1945	0	0	0	r_2092	0	0	0
24	r_1946	0	0	0	r_2093	0.033875	1000	-1000
25	r_1947	0	0	0	r_2094	-0.00061	-0.00044	-0.00074
26	r_1952	0	5.56E-07	0	r_2095	0	0	0
27	r_1963	-0.0012	-0.001204	-0.00123	r_2096	-8.51698	-8.51627	-8.51763
28	r_1964	0.001205	0.0012293	0.001204	r_2097	0	1000	-1000
29	r_1965	-0.56848	-0.56839	-0.58491	r_2098	0.00E+00	9.77E-05	-2.94E-05
30	r_1966	0	0	0	r_2099	0.00E+00	9.77E-05	0
31	r_1967	0	0.00E+00	0	r_2100	3.530337	3.530525	1.535111
32	r_1968	0	0	0	r_2101	0	0	-7.89E-06
33	r_1970	0	0	0	r_2102	0	0	0
34	r_1971	0	0	0	r_2103	0.00E+00	0.00E+00	0
35	r_1972	0	0.00E+00	0	r_2104	0	0	0
36	r_1974	0	4.80E-05	0	r_2105	0.00E+00	0.00E+00	0
37	r_1975	0	4.80E-05	0	r_2106	0.00E+00	8.64E-07	0.00E+00
38	r_1976	0	3.69E-05	0	r_2107	0	9.77E-05	-8.64E-07
39	r_1977	0.000603	0.0006273	0.000603	r_2108	9.48E-02	9.48E-02	9.48E-02
40	r_1978	1.909946	1.9099541	1.909927	r_2110	0	0	0
41	r_1979	1.962779	1.9628075	1.962771	r_2111	0.094757	0.094757	0.094756
42	r_1980	0	8.62E-06	0	r_2125	-0.00015	1000	-1000
43	r_1981	0	0	-4.05E-07	r_2129	0	0.000684	0
44	r_1984	0	7.19E-07	0	r_2133	0	0	0
45	r_1987	0	2.11E-06	0	r_2134	0	9.20E-07	0
46	r_1988	0	4.71E-06	0	r_2136	0	0	-9.20E-07
47	r_1989	0	4.71E-06	0	r_2137	0	8.26E-07	0
48	r_1990	0	0	0	r_2139	0	0	-8.26E-07
49	r_1991	0	0	-8.62E-06	r_2184	0	0	-2.56E-06
50	r_1992	-1.96278	-1.962771	-1.96281	r_2185	0	0.00E+00	-2.24E-06
51	r_1993	0	4.59E-07	0	r_2186	0	0	-2.00E-06
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2	r_1994	0	4.53E-07	0	r_2187	0	3.45E-06
3	r_1995	3.79E-05	3.84E-05	3.72E-05	r_2188	0	2.89E-06
4	r_1996	0	0	-1.48E-05	r_2189	0	1.42E-06
5	r_1997	0	0	0	r_2190	0	0
6	r_1998	0	0	-1.13E-06	r_2191	0	0
7	r_1999	0	0.00E+00	0	r_2192	0	0
8	r_2000	0	9.57E-07	0	r_2193	0	1.80E-06
9	r_2001	0.00E+00	1.21E-06	0.00E+00	r_2229	0.00E+00	0.00E+00
10	r_2002	0	1.21E-06	0	r_2230	0	0
11	r_2003	0	1.17E-06	0	r_2231	0.00E+00	1.07E-05
12	r_2004	0	0	0	r_2812	0	0
13	r_2005	-0.11521	-1.15E-01	-0.11521	r_2813	0	0
14	r_2008	0	0	0.00E+00	r_2814	0	0
15	r_2020	0	0.00E+00	0	r_2815	0	0
16	r_2022	8.80E-08	8.80E-08	8.80E-08	r_2816	0.00E+00	0.00E+00
17	r_2023	0	0.00E+00	0	r_2817	0.00E+00	0.00E+00
18	r_2024	0	2.11E-06	0	r_2818	0	0.00E+00
19	r_2025	0	0	0	r_2819	0	0.00E+00
20	r_2026	0	4.80E-05	0.00E+00	r_3332	0	1.71E-04
21	r_2027	0	4.80E-05	0	r_3333	0	1.71E-04
22	r_2028	0.00E+00	0.00E+00	0.00E+00	r_3334	0.00E+00	1.71E-04
23	r_2030	8.71E-05	8.71E-05	8.71E-05	r_3335	0	0.000171
24	r_2031	0.00E+00	2.74E-05	-4.80E-05	r_3336	0	0.000171
25	r_2032	0.830825	0.8308877	8.31E-01	r_3337	0	1.71E-04
26	r_2033	0	5.22E-06	0	r_3338	0.00E+00	1.71E-04
27	r_2036	0.00E+00	0.00E+00	0.00E+00	r_3339	0	1.71E-04
28	r_2037	0	8.62E-06	0	r_3340	0	0.000171
29	r_2038	0.00E+00	0.00E+00	0.00E+00	r_3341	0.00E+00	1.71E-04
30	r_2039	0	0.00E+00	0	r_3342	0.00E+00	1.71E-04
31	r_2040	0	0.00E+00	0	r_3343	0	0.000171
32	r_2041	0	0.00E+00	0	r_3344	0	1.71E-04
33	r_2042	0	0	0	r_3345	0	1.71E-04
34	r_2043	0	0	0	r_3346	0	1.71E-04
35	r_2044	0	0	0	r_3347	0	1.71E-04
36	r_2045	-0.56848	-0.56839	-0.56852	r_3508	0	6.21E-05
37	r_2046	0	8.68E-07	0	r_3509	0	6.21E-05
38	r_2049	0	0	0	r_3510	0	1000
39	r_2050	0	0.00E+00	0	r_3511	0	1000
40	r_2051	0	1.02E-06	0	r_3512	0	1.00E+03
41	r_2052	0	6.70E-07	0	r_3513	0.00E+00	1.00E+03
42	r_2053	0.000603	6.06E-04	0.000603	r_3514	0.000122	5.29E-04
43	r_2054	0.000603	0.000606	0.000603	r_3515	0.00E+00	1.00E+03
44	r_2055	0.00E+00	4.05E-07	0.00E+00	r_3516	0.00E+00	1.00E+03
45	r_2056	0	3.64E-06	0.00E+00	r_3517	0.001816	1000
46	r_2057	0	0	-3.64E-06	r_3518	0	1000
47	r_2058	0.00E+00	0.00E+00	0.00E+00	r_3519	0.000118	1.00E+03
48	r_2060	-0.0068	-0.006801	-0.00681	r_3520	0	1.00E+03
49	r_2061	0	1.22E-05	0	r_3521	0.00E+00	0.00E+00
50	r_2062	0	0	0	r_3522	0.00E+00	0.00E+00
51	r_2063	0	2.74E-05	0	r_3523	0	1000

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2	r_2064	0	1.75E-05	0 r_3524	0	1.00E+03	-1000
3	r_2065	0	1.75E-05	0 r_3525	0.000125	0.001372	-7.41E-05
4	r_2066	0	0	0 r_3526	-0.00209	-0.00186	-0.00247
5	r_2067	0	0	0 r_3527	-0.00012	-0.00012	-0.00053
6	r_2068	0	0	0 r_3528	-0.00206	1000	-1000
7	r_2069	0	0	0 r_3529	0.000245	0.001057	0.000245
8	r_2070	0	0.00E+00	0 r_3530	-0.00024	-0.00024	-0.00106
9	r_2071	0	0	0 r_3531	0.000985	0.001099	0.000971
10	r_2072	0	0.0164211	0 r_3532	0.000985	0.001099	0.000971
11	r_2073	0	0.00E+00	0 r_3533	-0.00099	-9.71E-04	-0.0011
12	r_2074	0	4.80E-05	0 r_3534	0.000908	0.00095	0.000528
13	r_2075	0	0	0 r_3535	0	0.00038	0
14	r_2080	0	1.75E-05	0 r_3536	-0.00087	1.00E+03	-1000
15	r_2082	0	0.00E+00	0 r_3537	0	0.00E+00	-0.00023
16	r_2083	0	9.37E-07	0 r_3538	0.000908	0.001105	0.000858
17	r_2084	0	9.37E-07	0.00E+00 r_3539	0	0	-0.0002
18	r_2085	0	0	-9.37E-07 r_3540	-0.00091	-8.58E-04	-0.00105
19	r_2086	0	0	0 r_3541	0	0.00E+00	0
20	r_2087	0	0.00E+00	0 r_3542	0.00E+00	1.14E-04	0.00E+00
21	r_2089	0	0	0 r_3543	-4.08E-05	1000	-1000
22	r_2090	0	0.00E+00	0 r_3544	4.08E-05	1000	-1.00E+03
23	r_2091	0	9.24E-06	0 r_3545	5.67E-04	5.71E-04	0.000553
24	r_2092	0	0.00E+00	0 r_3546	0.000341	0.000439	0.000292
25	r_2093	0.016328	1000	-1000 r_3547	0.001228	1.24E-03	0.001185
26	r_2094	-0.00057	-0.000521	-0.00063 r_3548	-0.00123	-1.18E-03	-0.00124
27	r_2095	0	0	0 r_3549	0	0.00E+00	0
28	r_2096	-8.37517	-8.374974	-8.37536 r_3550	0	0	0
29	r_2097	0	1000	-1000 r_3551	0	0	0
30	r_2098	0	2.74E-05	-8.25E-06 r_3552	7.69E-05	1000	-1000
31	r_2099	0	2.74E-05	0 r_3553	0	9.77E-05	0
32	r_2100	3.722078	3.7221306	1.758206 r_3554	-0.00012	0.000129	-0.00022
33	r_2101	0	0.00E+00	-2.22E-06 r_3555	0	0.000111	-0.00011
34	r_2102	0	0	0 r_3556	0	0.000113	-0.00016
35	r_2103	0	0.00E+00	0 r_3557	0.00E+00	1.11E-04	-0.00011
36	r_2104	0	0	0 r_3558	0	0.000113	-0.00016
37	r_2105	0	0.00E+00	0 r_3559	0	0.000111	-0.00011
38	r_2106	0	2.43E-07	0 r_3560	0.00E+00	9.77E-05	-1.14E-04
39	r_2107	0	2.74E-05	-2.43E-07 r_3561	0	9.77E-05	-0.00011
40	r_2108	0.08798	0.0879802	0.08798 r_3562	-0.00022	-5.23E-05	-0.00022
41	r_2110	0	0	0 r_3563	0	1.71E-04	-1.14E-04
42	r_2111	0.08798	0.0879802	0.08798 r_3564	0	0.000171	-1.09E-04
43	r_2125	-2.95E-05	1000	-1000 r_3565	0	0.000171	-5.56E-05
44	r_2129	0	1.92E-04	0 r_3566	0	0.000171	-0.00011
45	r_2133	0	0	0 r_3567	0	0.000171	-5.56E-05
46	r_2134	0	2.59E-07	0 r_3568	0	0.000171	-5.43E-05
47	r_2136	0	0	-2.59E-07 r_3569	0	1.71E-04	-3.68E-05
48	r_2137	0	2.32E-07	0 r_3570	0	3.97E-05	0
49	r_2139	0	0	-2.32E-07 r_3571	-3.17E-05	1000	-1000
50	r_2184	0	0	-7.19E-07 r_3572	0	1000	-1000
51	r_2185	0	0.00E+00	-6.30E-07 r_3573	0	1000	-1000
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2	r_2186	0	0.00E+00	-5.61E-07	r_3574	0	1000	-1000
3	r_2187	0	9.68E-07	0	r_3575	0	1000	-1000
4	r_2188	0	8.13E-07	0.00E+00	r_3576	0	1.00E+03	-1.00E+03
5	r_2189	0	4.00E-07	0	r_3577	0.000149	1.00E+03	-1000
6	r_2190	0	0	-9.68E-07	r_3578	0	1000	-1000
7	r_2191	0	0	-8.13E-07	r_3579	0	1000	-1.00E+03
8	r_2192	0	0	-4.00E-07	r_3580	0	1000	-1000
9	r_2193	0	5.05E-07	0	r_3581	0	0.000288	0
10	r_2229	0	0.00E+00	-9.68E-07	r_3582	0	0.000164	0
11	r_2230	0	0	-8.13E-07	r_3583	0	0.000164	0
12	r_2231	0	3.01E-06	-1.75E-05	r_3584	0	0.00E+00	-0.00016
13	r_2812	0	0	0	r_3585	-3.17E-05	1.00E+03	-1.00E+03
14	r_2813	0	0	0	r_3586	3.17E-05	1000	-1000
15	r_2814	0	0	0	r_3587	3.17E-05	1000	-1000
16	r_2815	0	0	0	r_3588	0.000118	0.000215	-9.77E-05
17	r_2816	0	0.00E+00	0	r_3589	0	0.000114	-9.77E-05
18	r_2817	0	0	0.00E+00	r_3590	0	0.00016	-9.77E-05
19	r_2818	0	0.00E+00	0	r_3591	0	0.000114	-9.77E-05
20	r_2819	0	0	0.00E+00	r_3592	0	1.60E-04	-9.77E-05
21	r_3332	0	4.80E-05	0.00E+00	r_3593	0	0.000114	-9.77E-05
22	r_3333	0	4.80E-05	0.00E+00	r_3594	0	1.14E-04	-9.77E-05
23	r_3334	0	4.80E-05	0.00E+00	r_3595	0	0.000114	-9.77E-05
24	r_3335	0	4.80E-05	0	r_3596	0	9.77E-05	0.00E+00
25	r_3336	0	4.80E-05	0	r_3597	0	4.22E-05	0.00E+00
26	r_3337	0	4.80E-05	0	r_3598	0	0	0.00E+00
27	r_3338	0	4.80E-05	0.00E+00	r_3599	0	1.00E+03	-1000
28	r_3339	0	4.80E-05	0.00E+00	r_3600	0	1.00E+03	-1000
29	r_3340	0	4.80E-05	0.00E+00	r_3601	0	1.71E-04	0
30	r_3341	0.00E+00	4.80E-05	0.00E+00	r_3602	0	0	-1.71E-04
31	r_3342	0	4.80E-05	0.00E+00	r_3603	0	0	-1.71E-04
32	r_3343	0	4.80E-05	0.00E+00	r_3604	0	0.000171	0.00E+00
33	r_3344	0	4.80E-05	0.00E+00	r_3605	0	0.00E+00	-0.00017
34	r_3345	0	4.80E-05	0	r_3606	0.00E+00	3.78E-05	0.00E+00
35	r_3346	0	4.80E-05	0	r_3607	0	4.06E-06	0.00E+00
36	r_3347	0	4.80E-05	0	r_3608	0	3.78E-05	0.00E+00
37	r_3508	0	1.75E-05	0	r_3609	0	9.77E-05	0
38	r_3509	0	1.75E-05	-1.08E-05	r_3610	0	3.78E-05	0
39	r_3510	0	1000	-1000	r_3611	0.00E+00	9.77E-05	0
40	r_3511	0	1000	-1000	r_3612	0	0	0
41	r_3512	0	1000	-1000	r_3613	0	0	0
42	r_3513	0	1.00E+03	-1000	r_3614	0	1000	-1000
43	r_3514	0.000114	3.04E-04	0.000114	r_3615	0	1000	-1000
44	r_3515	0	1.00E+03	-1000	r_3616	0	0.000171	-8.54E-05
45	r_3516	0	1.00E+03	-1000	r_3617	0.00E+00	1.71E-04	-8.54E-05
46	r_3517	0.001796	1.00E+03	-1000	r_3618	0	0.000171	-8.54E-05
47	r_3518	0	1.00E+03	-1000	r_3619	0.00E+00	1.71E-04	-8.54E-05
48	r_3519	0.000109	1.00E+03	-1000	r_3620	0	0.000171	-8.54E-05
49	r_3520	0	1.00E+03	-1000	r_3621	0.00E+00	1.71E-04	-8.54E-05
50	r_3521	0	0.00E+00	-6.67E-06	r_3622	0.00E+00	1.71E-04	-8.54E-05
51	r_3522	0	0.00E+00	-4.12E-06	r_3623	0	0.000171	-8.54E-05

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2	r_3523	0	1.00E+03	-1000	r_3624	0.00E+00	1.71E-04	-1.71E-04
3	r_3524	0	1.00E+03	-1000	r_3625	0	0.000171	-0.00017
4	r_3525	0.000116	6.95E-04	4.18E-05	r_3626	0.00E+00	1.71E-04	-0.00017
5	r_3526	-0.00194	-1.84E-03	-0.00213	r_3627	0	0.000171	-0.00017
6	r_3527	-0.00011	-1.14E-04	-0.0003	r_3628	0	0.000171	-0.00017
7	r_3528	-0.00202	1.00E+03	-1000	r_3629	0	0.000171	-0.00017
8	r_3529	0.000227	6.08E-04	0.000227	r_3630	0	0.000171	-0.00017
9	r_3530	-0.00023	-2.27E-04	-6.08E-04	r_3631	0	0.000171	-0.00017
10	r_3531	9.15E-04	0.0009467	0.000911	r_3632	0	8.54E-05	0
11	r_3532	0.000915	0.0009467	0.000911	r_3633	0	8.54E-05	0
12	r_3533	-0.00091	-0.000911	-0.00095	r_3634	0	8.54E-05	0.00E+00
13	r_3534	0.000843	0.0008551	0.000737	r_3635	0	8.54E-05	0
14	r_3535	0	0.0001067	0	r_3636	0	8.54E-05	0
15	r_3536	-0.00081	1000	-1000	r_3637	0	8.54E-05	0.00E+00
16	r_3537	0	0	-0.00011	r_3638	0	8.54E-05	0
17	r_3538	0.000843	0.0008991	0.000806	r_3639	0	8.54E-05	0
18	r_3539	0	0	-7.38E-05	r_3640	0	0	0
19	r_3540	-0.00084	-0.000806	-0.00088	r_3641	0.00E+00	0.00E+00	0
20	r_3541	0	0	0	r_3642	0.00E+00	0.00E+00	0
21	r_3542	0	4.22E-05	0.00E+00	r_3643	0	0	0
22	r_3543	-3.79E-05	1000	-1.00E+03	r_3644	0.00E+00	0.00E+00	0.00E+00
23	r_3544	3.79E-05	1000	-1000	r_3645	0	0	0
24	r_3545	0.000527	0.0005278	0.000523	r_3646	0	0	0.00E+00
25	r_3546	0.000316	0.0003443	2.80E-04	r_3647	0	0	0.00E+00
26	r_3547	0.00114	0.0011428	0.001128	r_3648	0	0.000171	0
27	r_3548	-0.00114	-0.001128	-0.00114	r_3649	0	0	-0.00017
28	r_3549	0	0	0	r_3650	0	0.000512	-1.71E-04
29	r_3550	0	0	0	r_3651	0	0.000171	0
30	r_3551	0	0	0	r_3652	0	0	-0.00017
31	r_3552	7.14E-05	1000	-1000	r_3653	0	0	-0.00051
32	r_3553	0	2.74E-05	0	r_3654	0	8.54E-05	0
33	r_3554	0	5.64E-05	-0.00014	r_3655	0	8.54E-05	0
34	r_3555	0	3.97E-05	-3.20E-05	r_3656	0	8.54E-05	0
35	r_3556	0	4.15E-05	-6.17E-05	r_3657	0	8.54E-05	0
36	r_3557	0	3.97E-05	-3.20E-05	r_3658	0	8.54E-05	0
37	r_3558	0	4.15E-05	-6.17E-05	r_3659	0	8.54E-05	0
38	r_3559	0	3.97E-05	-3.20E-05	r_3660	0	8.54E-05	0
39	r_3560	0	2.74E-05	-3.20E-05	r_3661	0	8.54E-05	0
40	r_3561	0	2.74E-05	-3.20E-05	r_3662	0	0.000235	0
41	r_3562	-0.00021	-0.000159	-0.00021	r_3663	0	0	-0.00023
42	r_3563	0	4.80E-05	-3.20E-05	r_3664	0.00E+00	5.12E-04	-1.71E-04
43	r_3564	0.00E+00	4.80E-05	-3.05E-05	r_3665	0	0	-0.00051
44	r_3565	0.00E+00	4.80E-05	-1.56E-05	r_3666	0	0.000171	0
45	r_3566	0	4.80E-05	-3.05E-05	r_3667	0	0	-0.00017
46	r_3567	0	4.80E-05	-1.56E-05	r_3668	0	0.000235	0
47	r_3568	0	4.80E-05	-1.53E-05	r_3669	-0.00051	0	-0.00051
48	r_3569	0	4.80E-05	-1.03E-05	r_3670	0	0	0
49	r_3570	0	1.13E-05	0	r_3671	0	0	0
50	r_3571	-2.95E-05	1000	-1000	r_3672	0	0.000117	0
51	r_3572	0	1000	-1000	r_3673	0	9.93E-05	0
52								
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2	r_3573	0.00E+00	1000	-1000	r_3674	0	0.000103
3	r_3574	0	1.00E+03	-1000	r_3675	0	9.93E-05
4	r_3575	0	1.00E+03	-1000	r_3676	0	0.000103
5	r_3576	0	1.00E+03	-1.00E+03	r_3677	0	9.93E-05
6	r_3577	2.95E-05	1.00E+03	-1.00E+03	r_3678	0	0.00E+00
7	r_3578	0	1.00E+03	-1.00E+03	r_3679	0	0
8	r_3579	0	1.00E+03	-1.00E+03	r_3680	0	0
9	r_3580	0	1.00E+03	-1.00E+03	r_3681	0	1000
10	r_3581	0	8.11E-05	0.00E+00	r_3682	0	1000
11	r_3582	0	4.61E-05	0.00E+00	r_3683	0	1000
12	r_3583	0	4.61E-05	0	r_3684	0	1000
13	r_3584	0	0.00E+00	-4.61E-05	r_3685	-0.00012	9.77E-05
14	r_3585	-2.95E-05	1.00E+03	-1.00E+03	r_3686	0.00E+00	9.77E-05
15	r_3586	2.95E-05	1.00E+03	-1.00E+03	r_3687	0	9.77E-05
16	r_3587	2.95E-05	1.00E+03	-1.00E+03	r_3688	0	9.77E-05
17	r_3588	0	1.37E-04	-2.74E-05	r_3689	0	9.77E-05
18	r_3589	0	3.20E-05	-2.74E-05	r_3690	0	9.77E-05
19	r_3590	0	6.17E-05	-2.74E-05	r_3691	0	9.77E-05
20	r_3591	0	3.20E-05	-2.74E-05	r_3692	0	9.77E-05
21	r_3592	0	6.17E-05	-2.74E-05	r_3693	0	9.77E-05
22	r_3593	0	3.20E-05	-2.74E-05	r_3694	0	9.77E-05
23	r_3594	0	3.20E-05	-2.74E-05	r_3695	0	9.77E-05
24	r_3595	0	3.20E-05	-2.74E-05	r_3696	0	9.77E-05
25	r_3596	0	2.74E-05	0	r_3697	0	9.77E-05
26	r_3597	0	1.19E-05	0	r_3698	0.00E+00	9.77E-05
27	r_3598	0	0	0	r_3699	0	9.77E-05
28	r_3599	0	1000	-1000	r_3700	0	9.77E-05
29	r_3600	0	1000	-1000	r_3701	0.00E+00	9.77E-05
30	r_3601	0	4.80E-05	0	r_3702	0	9.77E-05
31	r_3602	0	0	-4.80E-05	r_3703	0	9.77E-05
32	r_3603	0	0.00E+00	-4.80E-05	r_3704	0	9.77E-05
33	r_3604	0	4.80E-05	0	r_3705	0	9.77E-05
34	r_3605	0	0	-4.80E-05	r_3706	0	9.77E-05
35	r_3606	0.00E+00	1.07E-05	0	r_3707	0.00E+00	9.77E-05
36	r_3607	0.00E+00	1.14E-06	0	r_3708	0	9.77E-05
37	r_3608	0.00E+00	1.07E-05	0	r_3709	0	9.77E-05
38	r_3609	0	2.74E-05	0.00E+00	r_3710	0	9.77E-05
39	r_3610	0	1.07E-05	0.00E+00	r_3711	0	9.77E-05
40	r_3611	0	2.74E-05	0.00E+00	r_3712	0	9.77E-05
41	r_3612	0	0.00E+00	0.00E+00	r_3713	0	9.77E-05
42	r_3613	0	0.00E+00	0.00E+00	r_3714	0	9.77E-05
43	r_3614	0	1.00E+03	-1.00E+03	r_3715	0.00E+00	9.77E-05
44	r_3615	0	1.00E+03	-1.00E+03	r_3716	0	9.77E-05
45	r_3616	0	4.80E-05	-2.40E-05	r_3717	0.00E+00	0.00E+00
46	r_3617	0	4.80E-05	-2.40E-05	r_3718	0.00E+00	0.00E+00
47	r_3618	0	4.80E-05	-2.40E-05	r_3719	0.00E+00	0.00E+00
48	r_3619	0	4.80E-05	-2.40E-05	r_3720	0.00E+00	0.00E+00
49	r_3620	0	4.80E-05	-2.40E-05	r_3721	0	9.77E-05
50	r_3621	0.00E+00	4.80E-05	-2.40E-05	r_3722	0	9.77E-05
51	r_3622	0	4.80E-05	-2.40E-05	r_3723	0	9.77E-05

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2	r_3623	0	4.80E-05	-2.40E-05	r_3724	0.00E+00	9.77E-05	0
3	r_3624	0	4.80E-05	-4.80E-05	r_3725	0.00E+00	9.77E-05	0
4	r_3625	0	4.80E-05	-4.80E-05	r_3726	0.00E+00	9.77E-05	0
5	r_3626	0	4.80E-05	-4.80E-05	r_3727	0.00E+00	9.77E-05	0
6	r_3627	0	4.80E-05	-4.80E-05	r_3728	0.00E+00	9.77E-05	0.00E+00
7	r_3628	0	4.80E-05	-4.80E-05	r_3729	0.00E+00	9.77E-05	0
8	r_3629	0	4.80E-05	-4.80E-05	r_3730	0.00E+00	9.77E-05	0
9	r_3630	0	4.80E-05	-4.80E-05	r_3731	0	9.77E-05	0
10	r_3631	0	4.80E-05	-4.80E-05	r_3732	0	9.77E-05	0
11	r_3632	0	2.40E-05	0	r_3733	0	9.77E-05	0
12	r_3633	0	2.40E-05	0	r_3734	0	9.77E-05	0
13	r_3634	0	2.40E-05	0	r_3735	0	9.77E-05	0
14	r_3635	0.00E+00	2.40E-05	0	r_3736	0	9.77E-05	0
15	r_3636	0.00E+00	2.40E-05	0	r_3737	0	9.77E-05	0
16	r_3637	0	2.40E-05	0.00E+00	r_3738	0	9.77E-05	0
17	r_3638	0	2.40E-05	0.00E+00	r_3739	0	9.77E-05	0
18	r_3639	0	2.40E-05	0.00E+00	r_3740	0	9.77E-05	0
19	r_3640	0	0.00E+00	0.00E+00	r_3741	0	9.77E-05	0.00E+00
20	r_3641	0	0.00E+00	0.00E+00	r_3742	0	9.77E-05	0.00E+00
21	r_3642	0	0.00E+00	0.00E+00	r_3743	0	9.77E-05	-9.77E-05
22	r_3643	0	0.00E+00	0.00E+00	r_3744	0	9.77E-05	-9.77E-05
23	r_3644	0	0.00E+00	0.00E+00	r_3745	0	9.77E-05	-9.77E-05
24	r_3645	0	0.00E+00	0.00E+00	r_3746	0	9.77E-05	-9.77E-05
25	r_3646	0	0.00E+00	0.00E+00	r_3747	0	0	-9.77E-05
26	r_3647	0	0.00E+00	0.00E+00	r_3748	0	0	-9.77E-05
27	r_3648	0	4.80E-05	0.00E+00	r_3749	0	0	-9.77E-05
28	r_3649	0	0.00E+00	-4.80E-05	r_3750	0	0	-9.77E-05
29	r_3650	0	1.92E-04	-4.80E-05	r_3751	0	9.77E-05	-9.77E-05
30	r_3651	0	4.80E-05	0.00E+00	r_3752	0	9.77E-05	-9.77E-05
31	r_3652	0	0.00E+00	-4.80E-05	r_3753	0	9.77E-05	-9.77E-05
32	r_3653	0	0.00E+00	-0.00019	r_3754	0	9.77E-05	-9.77E-05
33	r_3654	0	2.40E-05	0	r_3755	0	0.000288	0
34	r_3655	0	2.40E-05	0	r_3756	0.00E+00	8.17E-05	0
35	r_3656	0	2.40E-05	0	r_3757	0	1.44E-04	0
36	r_3657	0	2.40E-05	0	r_3758	0	6.36E-05	0
37	r_3658	0	2.40E-05	0	r_3759	0	1.17E-04	0
38	r_3659	0	2.40E-05	0	r_3760	0	9.93E-05	0
39	r_3660	0	2.40E-05	0	r_3761	0	1.03E-04	0
40	r_3661	0	2.40E-05	0	r_3762	0	9.93E-05	0
41	r_3662	0	0.0001071	0	r_3763	0	1.03E-04	0
42	r_3663	0	0	-0.00011	r_3764	0	9.93E-05	0
43	r_3664	0	0.0001921	-4.80E-05	r_3765	0.000511	0.000514	0
44	r_3665	0	0	-0.00019	r_3766	0	0.000126	0
45	r_3666	0	4.80E-05	0	r_3767	0	0.000288	0
46	r_3667	0	0	-4.80E-05	r_3768	0.00E+00	1.14E-04	0
47	r_3668	0.00E+00	1.07E-04	0.00E+00	r_3769	0.00E+00	2.88E-04	0
48	r_3669	-4.75E-04	-2.82E-04	-4.75E-04	r_3770	0	0.000114	0
49	r_3670	0	0	0.00E+00	r_3771	0	0.000152	0
50	r_3671	0	0	0.00E+00	r_3772	0.00E+00	1.14E-04	0
51	r_3672	0	5.36E-05	0	r_3773	0.000511	0.000514	0
52								
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2	r_3673	0	3.69E-05	0.00E+00	r_3774	0	0.000126	0
3	r_3674	0	4.05E-05	0	r_3775	0	0.000288	0
4	r_3675	0	3.69E-05	0	r_3776	0	0.000114	0
5	r_3676	0	4.05E-05	0	r_3777	0	0.000288	0
6	r_3677	0	3.69E-05	0	r_3778	0	0.000114	0
7	r_3678	0	0.00E+00	0	r_3779	0	1.52E-04	0
8	r_3679	0	0.00E+00	0	r_3780	0	1.14E-04	0
9	r_3680	0	0.00E+00	0	r_3781	0	1.00E+03	-1000
10	r_3681	0	1.00E+03	-1000	r_3782	0	1.00E+03	-1000
11	r_3682	0	1.00E+03	-1000	r_3783	0	1.00E+03	-1000
12	r_3683	0.00E+00	1000	-1000	r_3784	0	1.00E+03	-1000
13	r_3684	0.00E+00	1000	-1000	r_3785	0	1.00E+03	-1000
14	r_3685	0	2.74E-05	-1.09E-04	r_3786	0.00E+00	1.00E+03	-1000
15	r_3686	0.00E+00	2.74E-05	-3.20E-05	r_3787	0	1000	-1000
16	r_3687	0.00E+00	2.74E-05	-6.17E-05	r_3788	0	1000	-1000
17	r_3688	0	2.74E-05	-2.74E-05	r_3789	-0.00012	0	-0.00032
18	r_3689	0	2.74E-05	-3.20E-05	r_3790	0.00E+00	0.00E+00	-0.0002
19	r_3690	0	2.74E-05	-3.20E-05	r_3791	0.00E+00	0.00E+00	-0.00022
20	r_3691	0	2.74E-05	-2.11E-05	r_3792	0	0	-0.0002
21	r_3692	0	2.74E-05	-2.74E-05	r_3793	0	0	-0.00022
22	r_3693	0	2.74E-05	-6.17E-05	r_3794	0	0	-0.0002
23	r_3694	0	2.74E-05	-3.20E-05	r_3795	0	0	-0.0002
24	r_3695	0	2.74E-05	-3.08E-05	r_3796	0	0	-0.0002
25	r_3696	0	2.74E-05	-2.74E-05	r_3797	0	0.000235	0
26	r_3697	0	2.74E-05	-2.11E-05	r_3798	0	1.99E-04	0
27	r_3698	0	2.74E-05	-3.20E-05	r_3799	0	0.000206	0
28	r_3699	0.00E+00	2.74E-05	-1.57E-05	r_3800	0	1.99E-04	0
29	r_3700	0	2.74E-05	-2.74E-05	r_3801	0	0.000206	0
30	r_3701	0	2.74E-05	-6.17E-05	r_3802	0.00E+00	1.99E-04	0
31	r_3702	0	2.74E-05	-3.20E-05	r_3803	0.00E+00	1.99E-04	0
32	r_3703	0	2.74E-05	-3.08E-05	r_3804	0.00E+00	1.99E-04	0
33	r_3704	0	2.74E-05	-2.74E-05	r_3805	1.18E-04	2.16E-04	-0.00013
34	r_3705	0.00E+00	2.74E-05	-2.11E-05	r_3806	0.00E+00	1.49E-04	-0.00017
35	r_3706	0	2.74E-05	-3.20E-05	r_3807	0.00E+00	1.63E-04	-0.00017
36	r_3707	0.00E+00	2.74E-05	-1.57E-05	r_3808	0.00E+00	1.49E-04	-0.00017
37	r_3708	0	2.74E-05	-2.74E-05	r_3809	0	0.000163	-0.00017
38	r_3709	0	2.74E-05	-3.08E-05	r_3810	0.00E+00	1.49E-04	-0.00017
39	r_3710	0	2.74E-05	-3.20E-05	r_3811	0.00E+00	1.49E-04	-0.00017
40	r_3711	0	2.74E-05	-2.06E-05	r_3812	0.00E+00	1.49E-04	-0.00017
41	r_3712	0	2.74E-05	-2.74E-05	r_3813	0.00E+00	5.12E-04	0.00E+00
42	r_3713	0	2.74E-05	-1.57E-05	r_3814	0.00E+00	1.08E-04	0
43	r_3714	0	2.74E-05	-3.20E-05	r_3815	0.00E+00	2.03E-04	0
44	r_3715	0	2.74E-05	-1.25E-05	r_3816	0.00E+00	9.93E-05	0.00E+00
45	r_3716	0	2.74E-05	-2.74E-05	r_3817	0	2.03E-04	0.00E+00
46	r_3717	0	0.00E+00	-2.74E-05	r_3818	0	9.93E-05	0
47	r_3718	0	0.00E+00	-2.74E-05	r_3819	0	1.25E-04	0
48	r_3719	0	0.00E+00	-2.74E-05	r_3820	0	9.93E-05	0
49	r_3720	0	0.00E+00	-2.74E-05	r_3821	0	5.12E-04	0.00E+00
50	r_3721	0	2.74E-05	0.00E+00	r_3822	0	1.08E-04	0.00E+00
51	r_3722	0	2.74E-05	0.00E+00	r_3823	0	2.03E-04	0

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2	r_3723	0	2.74E-05	0.00E+00	r_3824	0	9.93E-05	0.00E+00	
3	r_3724	0	2.74E-05	0.00E+00	r_3825	0	2.03E-04	0.00E+00	
4	r_3725	0	2.74E-05	0.00E+00	r_3826	0	9.93E-05	0	
5	r_3726	0	2.74E-05	0.00E+00	r_3827	0	1.25E-04	0	
6	r_3727	0	2.74E-05	0.00E+00	r_3828	0	9.93E-05	0	
7	r_3728	0	2.74E-05	0.00E+00	r_3829	0	0.00E+00	0.00E+00	
8	r_3729	0	2.74E-05	0.00E+00	r_3830	0	0.00E+00	0.00E+00	
9	r_3730	0	2.74E-05	0.00E+00	r_3831	0.00E+00	0.00E+00	0	
10	r_3731	0	2.74E-05	0.00E+00	r_3832	0	0.00E+00	0.00E+00	
11	r_3732	0	2.74E-05	0.00E+00	r_3833	0	0.00E+00	0.00E+00	
12	r_3733	0	2.74E-05	0.00E+00	r_3834	0	0.00E+00	0	
13	r_3734	0	2.74E-05	0.00E+00	r_3835	0.00E+00	0.00E+00	0	
14	r_3735	0	2.74E-05	0.00E+00	r_3836	0.00E+00	0.00E+00	0.00E+00	
15	r_3736	0	2.74E-05	0.00E+00	r_3837	0.00E+00	1.71E-04	0.00E+00	
16	r_3737	0	2.74E-05	0.00E+00	r_3838	0.00E+00	1.71E-04	0.00E+00	
17	r_3738	0	2.74E-05	0.00E+00	r_3839	0.00E+00	1.71E-04	0	
18	r_3739	0	2.74E-05	0.00E+00	r_3840	0.00E+00	1.71E-04	0.00E+00	
19	r_3740	0	2.74E-05	0.00E+00	r_3841	0.00E+00	1.71E-04	0.00E+00	
20	r_3741	0	2.74E-05	0.00E+00	r_3842	0.00E+00	1.71E-04	0.00E+00	
21	r_3742	0	2.74E-05	0	r_3843	0	0.000171	0.00E+00	
22	r_3743	0	2.74E-05	-2.74E-05	r_3844	0	0.000171	0.00E+00	
23	r_3744	0	2.74E-05	-2.74E-05	r_3845	0	0.000512	0.00E+00	
24	r_3745	0	2.74E-05	-2.74E-05	r_3846	0	1.08E-04	0	
25	r_3746	0	2.74E-05	-2.74E-05	r_3847	0	2.03E-04	0	
26	r_3747	0	0.00E+00	-2.74E-05	r_3848	0	9.93E-05	0	
27	r_3748	0	0.00E+00	-2.74E-05	r_3849	0.00E+00	2.03E-04	0.00E+00	
28	r_3749	0	0.00E+00	-2.74E-05	r_3850	0.00E+00	9.93E-05	0	
29	r_3750	0	0.00E+00	-2.74E-05	r_3851	0	1.25E-04	0	
30	r_3751	0	2.74E-05	-2.74E-05	r_3852	0.00E+00	9.93E-05	0	
31	r_3752	0	2.74E-05	-2.74E-05	r_3853	0	5.12E-04	0	
32	r_3753	0	2.74E-05	-2.74E-05	r_3854	0	1.08E-04	0	
33	r_3754	0	2.74E-05	-2.74E-05	r_3855	0	2.03E-04	0	
34	r_3755	0	8.11E-05	0	r_3856	0	9.93E-05	0	
35	r_3756	0	2.30E-05	0	r_3857	0	2.03E-04	0	
36	r_3757	0	4.05E-05	0	r_3858	0	9.93E-05	0	
37	r_3758	0	1.79E-05	0	r_3859	0	1.25E-04	0	
38	r_3759	0	5.36E-05	0	r_3860	0	9.93E-05	0	
39	r_3760	0	3.69E-05	0	r_3861	0	1.71E-04	0	
40	r_3761	0	4.05E-05	0	r_3862	0	1.71E-04	0	
41	r_3762	0	3.69E-05	0	r_3863	0.00E+00	1.71E-04	0	
42	r_3763	0	4.05E-05	0	r_3864	0.00E+00	1.71E-04	0	
43	r_3764	0	3.69E-05	0.00E+00	r_3865	0.00E+00	1.71E-04	0	
44	r_3765	0.000475	4.75E-04	2.82E-04	r_3866	0.00E+00	1.71E-04	0	
45	r_3766	0	4.35E-05	0.00E+00	r_3867	0.00E+00	1.71E-04	0	
46	r_3767	0	8.11E-05	0.00E+00	r_3868	0.00E+00	1.71E-04	0.00E+00	
47	r_3768	0	4.22E-05	0.00E+00	r_3869	0.00E+00	1.71E-04	-8.54E-05	
48	r_3769	0	8.11E-05	0.00E+00	r_3870	0.00E+00	1.71E-04	-8.54E-05	
49	r_3770	0	4.22E-05	0.00E+00	r_3871	0.00E+00	1.71E-04	-8.54E-05	
50	r_3771	0	4.61E-05	0.00E+00	r_3872	0.00E+00	1.71E-04	-8.54E-05	
51	r_3772	0	4.22E-05	0.00E+00	r_3873	0.00E+00	1.71E-04	-8.54E-05	
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2	r_3773	0.000475	4.75E-04	2.82E-04	r_3874	0.00E+00	1.71E-04	-8.54E-05
3	r_3774	0	4.35E-05	0.00E+00	r_3875	0.00E+00	1.71E-04	-8.54E-05
4	r_3775	0	8.11E-05	0.00E+00	r_3876	0.00E+00	1.71E-04	-8.54E-05
5	r_3776	0	4.22E-05	0	r_3877	0.00E+00	1.14E-04	0.00E+00
6	r_3777	0	8.11E-05	0	r_3878	0.00E+00	1.14E-04	0.00E+00
7	r_3778	0	4.22E-05	0	r_3879	0	1.14E-04	0.00E+00
8	r_3779	0	4.61E-05	0	r_3880	0	0.000114	0
9	r_3780	0	4.22E-05	0	r_3881	0	1.14E-04	0
10	r_3781	0	1.00E+03	-1000	r_3882	0	0.000114	0
11	r_3782	0	1.00E+03	-1000	r_3883	0	1.14E-04	0
12	r_3783	0	1.00E+03	-1000	r_3884	0	0.000114	0
13	r_3784	0	1.00E+03	-1000	r_3885	0	0.00E+00	0
14	r_3785	0	1.00E+03	-1000	r_3886	0	0	0
15	r_3786	0	1000	-1000	r_3887	0	0.00E+00	0
16	r_3787	0	1.00E+03	-1000	r_3888	0	0	0
17	r_3788	0	1000	-1000	r_3889	0	0.00E+00	0
18	r_3789	-0.00011	0.00E+00	-0.00018	r_3890	0	0	0
19	r_3790	0	0	-7.38E-05	r_3891	0	0	0.00E+00
20	r_3791	0	0.00E+00	-8.50E-05	r_3892	0	0	0
21	r_3792	0	0.00E+00	-7.38E-05	r_3893	0	0	0
22	r_3793	0	0.00E+00	-8.50E-05	r_3894	0.00E+00	0.00E+00	0
23	r_3794	0	0	-7.38E-05	r_3895	0.00E+00	0.00E+00	0
24	r_3795	0	0.00E+00	-7.38E-05	r_3896	0.00E+00	0.00E+00	0
25	r_3796	0	0	-7.38E-05	r_3897	0.00E+00	0.00E+00	0
26	r_3797	0	1.07E-04	0	r_3898	0	0	0
27	r_3798	0	7.38E-05	0	r_3899	0.00E+00	0.00E+00	0
28	r_3799	0	8.09E-05	0	r_3900	0	0	0
29	r_3800	0	7.38E-05	0	r_3901	0	1000	-1000
30	r_3801	0	8.09E-05	0	r_3902	0	1000	-1000
31	r_3802	0	7.38E-05	0	r_3903	0	0.000114	0
32	r_3803	0.00E+00	7.38E-05	0.00E+00	r_3904	0	0.000114	0
33	r_3804	0	7.38E-05	0	r_3905	0	0.000114	0
34	r_3805	0.000109	0.000137	-7.18E-06	r_3906	0	0.000114	0
35	r_3806	0	7.38E-05	-4.80E-05	r_3907	0	0.000114	0
36	r_3807	0	8.13E-05	-4.80E-05	r_3908	0	0.000114	0
37	r_3808	0	7.38E-05	-4.80E-05	r_3909	0	0.000114	0
38	r_3809	0	8.13E-05	-4.80E-05	r_3910	0	0.000114	0
39	r_3810	0	7.38E-05	-4.80E-05	r_3911	0.00E+00	1.71E-04	-0.00017
40	r_3811	0.00E+00	7.38E-05	-4.80E-05	r_3912	0.00E+00	1.71E-04	-1.71E-04
41	r_3812	0	7.38E-05	-4.80E-05	r_3913	0.00E+00	1.71E-04	-1.71E-04
42	r_3813	0	0.0001921	0.00E+00	r_3914	0.00E+00	1.71E-04	-0.00017
43	r_3814	0	3.73E-05	0	r_3915	0	0.000171	-0.00017
44	r_3815	0	5.70E-05	0.00E+00	r_3916	0	0.000171	-0.00017
45	r_3816	0	3.69E-05	0.00E+00	r_3917	0	0.000171	-0.00017
46	r_3817	0	5.70E-05	0.00E+00	r_3918	0	0.000171	-0.00017
47	r_3818	0.00E+00	3.69E-05	0	r_3919	0	0.000171	0
48	r_3819	0	3.79E-05	0	r_3920	0	0.000171	0
49	r_3820	0	3.69E-05	0	r_3921	0	0.000171	0
50	r_3821	0.00E+00	1.92E-04	0.00E+00	r_3922	0	0.000171	0
51	r_3822	0	3.73E-05	0	r_3923	0	0.000171	0

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2	r_3823	0	5.70E-05	0 r_3924	0	0.000171	0
3	r_3824	0	3.69E-05	0 r_3925	0.00E+00	1.71E-04	0
4	r_3825	0	5.70E-05	0 r_3926	0	0.000171	0
5	r_3826	0.00E+00	3.69E-05	0.00E+00 r_3927	0	9.77E-05	0
6	r_3827	0	3.79E-05	0.00E+00 r_3928	0	9.77E-05	0
7	r_3828	0	3.69E-05	0.00E+00 r_3929	0	8.54E-05	0
8	r_3829	0.00E+00	0.00E+00	0.00E+00 r_3930	0	8.54E-05	0
9	r_3830	0	0.00E+00	0.00E+00 r_3931	0	8.54E-05	0
10	r_3831	0	0.00E+00	0.00E+00 r_3932	0	8.54E-05	0
11	r_3832	0	0.00E+00	0.00E+00 r_3933	0.00E+00	8.54E-05	0.00E+00
12	r_3833	0	0.00E+00	0.00E+00 r_3934	0.00E+00	8.54E-05	0
13	r_3834	0	0	0 r_3935	0.00E+00	8.54E-05	0
14	r_3835	0	0.00E+00	0 r_3936	0.00E+00	8.54E-05	0
15	r_3836	0	0.00E+00	0 r_3937	4.08E-05	4.25E-05	-5.68E-05
16	r_3837	0	4.80E-05	0 r_3938	0.00E+00	4.03E-05	-9.77E-05
17	r_3838	0	4.80E-05	0 r_3939	0.00E+00	1.00E+03	-1000
18	r_3839	0.00E+00	4.80E-05	0.00E+00 r_3940	0.00E+00	1.71E-04	0
19	r_3840	0	4.80E-05	0 r_3941	0.00E+00	1.71E-04	0
20	r_3841	0	4.80E-05	0 r_3942	0.00E+00	1.71E-04	0
21	r_3842	0	4.80E-05	0 r_3943	0.00E+00	1.71E-04	0
22	r_3843	0	4.80E-05	0 r_3944	0.00E+00	1.71E-04	0
23	r_3844	0	4.80E-05	0 r_3945	0.00E+00	1.71E-04	0
24	r_3845	0	1.92E-04	0 r_3946	0.00E+00	1.71E-04	0
25	r_3846	0	3.73E-05	0 r_3947	0.00E+00	1.71E-04	0
26	r_3847	0	5.70E-05	0 r_3948	0.00E+00	1.71E-04	0
27	r_3848	0	3.69E-05	0 r_3949	0.00E+00	8.54E-05	0
28	r_3849	0	5.70E-05	0 r_3950	0.00E+00	8.54E-05	0
29	r_3850	0	3.69E-05	0 r_3951	0.00E+00	8.54E-05	0
30	r_3851	0	3.79E-05	0 r_3952	0.00E+00	8.54E-05	0
31	r_3852	0	3.69E-05	0 r_3953	0.00E+00	8.54E-05	0
32	r_3853	0	0.0001921	0 r_3954	0.00E+00	8.54E-05	0
33	r_3854	0	3.73E-05	0 r_3955	0.00E+00	8.54E-05	0
34	r_3855	0	5.70E-05	0 r_3956	0.00E+00	8.54E-05	0
35	r_3856	0	3.69E-05	0 r_3957	5.11E-04	5.14E-04	-5.34E-05
36	r_3857	0	5.70E-05	0 r_3958	0.00E+00	0.00E+00	0
37	r_3858	0	3.69E-05	0 r_3959	0.00E+00	0.00E+00	-0.00012
38	r_3859	0	3.79E-05	0 r_3960	0.00E+00	1.17E-04	0
39	r_3860	0	3.69E-05	0 r_3961	0.00E+00	0.00E+00	-0.00012
40	r_3861	0	4.80E-05	0 r_3962	0.00E+00	0.00E+00	-0.00012
41	r_3862	0	4.80E-05	0 r_3973	7.69E-05	7.69E-05	7.69E-05
42	r_3863	0	4.80E-05	0 r_3987	3.70E-05	3.70E-05	3.70E-05
43	r_3864	0	4.80E-05	0 r_3996	2.73E-04	2.73E-04	0.000273
44	r_3865	0.00E+00	4.80E-05	0.00E+00 r_4005	6.60E-05	6.60E-05	6.60E-05
45	r_3866	0.00E+00	4.80E-05	0.00E+00 r_4038	7.40E-05	7.40E-05	7.40E-05
46	r_3867	0	4.80E-05	0 r_4040	9.48E-08	9.48E-08	9.48E-08
47	r_3868	0.00E+00	4.80E-05	0.00E+00 r_4043	0	0	0
48	r_3869	0.00E+00	4.80E-05	-2.40E-05 r_4044	0	0	0
49	r_3870	0.00E+00	4.80E-05	-2.40E-05 r_4041	0.094757	0.094757	0.094756
50	r_3871	0	4.80E-05	-2.40E-05			
51	r_3872	0	4.80E-05	-2.40E-05			
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2	r_3873	0	4.80E-05	-2.40E-05
3	r_3874	0	4.80E-05	-2.40E-05
4	r_3875	0	4.80E-05	-2.40E-05
5	r_3876	0	4.80E-05	-2.40E-05
6	r_3877	0	4.22E-05	0
7	r_3878	0	4.22E-05	0
8	r_3879	0	4.22E-05	0
9	r_3880	0	4.22E-05	0
10	r_3881	0	4.22E-05	0
11	r_3882	0	4.22E-05	0
12	r_3883	0	4.22E-05	0
13	r_3884	0	4.22E-05	0
14	r_3885	0	0.00E+00	0
15	r_3886	0	0.00E+00	0
16	r_3887	0	0.00E+00	0
17	r_3888	0	0.00E+00	0
18	r_3889	0	0.00E+00	0
19	r_3890	0	0.00E+00	0.00E+00
20	r_3891	0	0.00E+00	0.00E+00
21	r_3892	0	0.00E+00	0.00E+00
22	r_3893	0	0.00E+00	0.00E+00
23	r_3894	0	0.00E+00	0.00E+00
24	r_3895	0	0.00E+00	0.00E+00
25	r_3896	0	0.00E+00	0.00E+00
26	r_3897	0	0.00E+00	0.00E+00
27	r_3898	0	0.00E+00	0
28	r_3899	0	0.00E+00	0
29	r_3900	0	0.00E+00	0
30	r_3901	0	1.00E+03	-1000
31	r_3902	0	1.00E+03	-1000
32	r_3903	0	4.22E-05	0
33	r_3904	0	4.22E-05	0
34	r_3905	0	4.22E-05	0
35	r_3906	0	4.22E-05	0
36	r_3907	0	4.22E-05	0
37	r_3908	0	4.22E-05	0
38	r_3909	0	4.22E-05	0
39	r_3910	0	4.22E-05	0
40	r_3911	0	4.80E-05	-4.80E-05
41	r_3912	0	4.80E-05	-4.80E-05
42	r_3913	0	4.80E-05	-4.80E-05
43	r_3914	0	4.80E-05	-4.80E-05
44	r_3915	0	4.80E-05	-4.80E-05
45	r_3916	0	4.80E-05	-4.80E-05
46	r_3917	0	4.80E-05	-4.80E-05
47	r_3918	0	4.80E-05	-4.80E-05
48	r_3919	0	4.80E-05	0
49	r_3920	0	4.80E-05	0
50	r_3921	0	4.80E-05	0
51	r_3922	0.00E+00	4.80E-05	0
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2	r_3923	0.00E+00	4.80E-05	0
3	r_3924	0	4.80E-05	0
4	r_3925	0	4.80E-05	0
5	r_3926	0	4.80E-05	0
6	r_3927	0	2.74E-05	0
7	r_3928	0	2.74E-05	0
8	r_3929	0	2.40E-05	0
9	r_3930	0	2.40E-05	0
10	r_3931	0	2.40E-05	0
11	r_3932	0	2.40E-05	0.00E+00
12	r_3933	0	2.40E-05	0.00E+00
13	r_3934	0	2.40E-05	0.00E+00
14	r_3935	0	2.40E-05	0.00E+00
15	r_3936	0	2.40E-05	0.00E+00
16	r_3937	3.79E-05	3.84E-05	1.05E-05
17	r_3938	0	2.25E-05	-2.74E-05
18	r_3939	0	1.00E+03	-1.00E+03
19	r_3940	0	4.80E-05	0
20	r_3941	0	4.80E-05	0
21	r_3942	0	4.80E-05	0
22	r_3943	0.00E+00	4.80E-05	0.00E+00
23	r_3944	0	4.80E-05	0
24	r_3945	0	4.80E-05	0
25	r_3946	0	4.80E-05	0
26	r_3947	0	4.80E-05	0
27	r_3948	0	4.80E-05	0
28	r_3949	0	2.40E-05	0
29	r_3950	0	2.40E-05	0
30	r_3951	0	2.40E-05	0
31	r_3952	0	2.40E-05	0
32	r_3953	0	2.40E-05	0
33	r_3954	0	2.40E-05	0
34	r_3955	0	2.40E-05	0
35	r_3956	0	2.40E-05	0
36	r_3957	0.000475	4.75E-04	0.000282
37	r_3958	0.00E+00	0.00E+00	0.00E+00
38	r_3959	0	0.00E+00	-5.36E-05
39	r_3960	0	5.36E-05	0
40	r_3961	0.00E+00	0.00E+00	-5.36E-05
41	r_3962	0	0.00E+00	-5.36E-05
42	r_3973	7.14E-05	7.14E-05	7.14E-05
43	r_3987	3.43E-05	3.43E-05	3.43E-05
44	r_3996	0.000253	2.53E-04	0.000253
45	r_4005	6.13E-05	6.13E-05	6.13E-05
46	r_4038	6.87E-05	6.87E-05	6.87E-05
47	r_4040	8.80E-08	8.80E-08	8.80E-08
48	r_4043	0.00E+00	0.00E+00	0.00E+00
49	r_4044	0.00E+00	0.00E+00	0.00E+00
50	r_4041	0.08798	8.80E-02	0.08798
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For Peer Review

Comparable fluxes								Rxn ID
Rxn ID	Y7.Fe	Y7.Fe max	Y7.Fe min	Y7.6	Y7.6 max	Y7.6 min		r_0001
r_0001	0	1.92E-05	0	0.00E+00	6.84E-05	0		r_0001
r_0002	0	1.92E-05	0	0.00E+00	6.84E-05	0		r_0001
r_0003	0	0	-2.41E-06	0	0	-8.59E-06		r_0001
r_0004	0	1.63E-05	0	0.00E+00	5.79E-05	0		r_0002
r_0005	0.09984	0.0998399	0.09984	0.10753	0.10753	0.107529		r_0002
r_0006	0.09984	0.0998399	0.09984	0.10753	0.10753	0.107529		r_0002
r_0007	0.005833	0.0058348	0.005833	0.006282	0.006288	0.006282		r_0003
r_0012	0	2.91E-05	0	0	0.000104	0		r_0004
r_0013	0	1.34E-06	0	0.00E+00	4.77E-06	0		r_0004
r_0014	8.71E-05	8.71E-05	8.71E-05	9.38E-05	9.38E-05	9.38E-05		r_0004
r_0015	8.71E-05	8.71E-05	8.71E-05	9.38E-05	9.38E-05	9.38E-05		r_0005
r_0016	0.016954	0.0169554	0.016954	0.01826	0.018265	0.018259		r_0005
r_0017	0	0	0	0	0	0		r_0006
r_0018	0.02518	0.0251814	0.02518	0.027119	0.027125	0.027119		r_0006
r_0019	0	9.33E-07	0	0.00E+00	3.32E-06	0		r_0007
r_0020	0.038377	0.0383784	0.038185	0.025044	0.025049	0.02436		r_0012
r_0021	0	0	0	0	0	0		r_0013
r_0022	0	0	0	0	0	0		r_0013
r_0023	-0.02608	-0.026077	-0.02608	-0.02809	-0.02809	-0.02809		r_0014
r_0024	0	4.57E-05	0	0	0.000163	0		r_0015
r_0025	0.026077	0.0260791	0.026032	0.028086	0.028092	0.027923		r_0016
r_0026	0	1.34E-06	0	0.00E+00	4.77E-06	0		r_0016
r_0027	0.02518	0.0251814	0.02518	0.027119	0.027125	0.027119		r_0017
r_0028	0	0	0	0	0	0		r_0018
r_0029	0	0.0001921	0	0	0.000684	0		r_0018
r_0030	0.026077	0.0260791	0.025885	0.028086	0.028092	0.027402		r_0018
r_0032	0.005041	0.005056	0.00504	0.00543	0.005482	0.005425		r_0019
r_0033	0	2.74E-05	0	0.00E+00	9.77E-05	0		r_0020
r_0034	0	0	0	0	0	0		r_0021
r_0035	0	0	0	0	0	0		r_0021
r_0036	0	0	0	0	0	0		r_0021
r_0037	0	0	0	0	0	0		r_0021
r_0038	0.000174	0.0001742	0.000174	0.000188	0.000188	0.000188		r_0021
r_0039	0.038377	0.0383784	0.038377	0.025044	0.025049	0.025044		r_0021
r_0040	0.038377	0.0383784	0.038377	0.025044	0.025049	0.025044		r_0021
r_0041	3.79E-05	3.84E-05	3.72E-05	4.08E-05	4.25E-05	3.95E-05		r_0022
r_0042	0	0.0001921	0	0	0.000684	0		r_0022
r_0043	0	0	0	0	0	0		r_0022
r_0044	0	0	0	0	0	0		r_0022
r_0045	0.015124	0.0151242	0.015124	0	0	0		r_0022
r_0057	0	1.08E-05	0	0.00E+00	3.84E-05	0		r_0022
r_0058	0.015124	0.0151242	0.015124	0	0	0		r_0022
r_0059	0	0	0	0	0	0		r_0023
r_0060	-0.02608	-0.026077	-0.02608	-0.02809	-0.02809	-0.02809		r_0024
r_0061	0.026077	0.0260791	0.026077	0.028086	0.028092	0.028086		r_0024
r_0062	0	2.36E-06	0	0.00E+00	8.40E-06	0		r_0025
r_0063	0	9.33E-07	0	0.00E+00	3.32E-06	0		r_0027
r_0064	0	1.69E-06	0	0.00E+00	6.00E-06	0		r_0028

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2	r_0065	0.038377	0.0383784	0.038377	0.025044	0.025049	0.025044	r_0029
3	r_0066	0	1.52E-06	0	0.00E+00	5.43E-06	0	r_0030
4	r_0067	0	1.52E-06	0	0.00E+00	5.43E-06	0	r_0032
5	r_0068	0	4.57E-05	0	0	0.000163	0	r_0033
6	r_0069	0	0	0	0	0	0	r_0033
7	r_0070	0	0	0	0	0	0	r_0034
8	r_0072	0	1.81E-06	0	0.00E+00	6.44E-06	0	r_0035
9	r_0073	0	0	-4.80E-05	0	0	-0.00017	r_0036
10	r_0074	0	4.80E-05	0	0	0.000171	0	r_0037
11	r_0075	0	1.34E-06	0	0.00E+00	4.77E-06	0	r_0038
12	r_0076	0	4.80E-05	0	0	0.000171	0	r_0039
13	r_0077	0	4.80E-05	0	0	0.000171	0	r_0040
14	r_0078	0	4.80E-05	0	0	0.000171	0	r_0041
15	r_0079	0.023833	0.0238353	0.023833	0.00938	0.009388	0.00938	r_0042
16	r_0080	0.006194	0.0061983	0.006182	0.006672	0.006682	0.006628	r_0042
17	r_0081	7.04E-07	7.04E-07	7.04E-07	7.58E-07	7.58E-07	7.58E-07	r_0045
18	r_0082	0	4.80E-05	0	0	0.000171	0	r_0057
19	r_0083	0	4.80E-05	0	0	0.000171	0	r_0058
20	r_0084	0	0	0	0	0	0	r_0059
21	r_0085	0	0	0	0	0	0	r_0060
22	r_0086	0	1.34E-06	0	0.00E+00	4.77E-06	0	r_0061
23	r_0087	0	1.34E-06	0	0.00E+00	4.77E-06	0	r_0062
24	r_0088	0	0	-4.80E-05	0	0	-0.00017	r_0062
25	r_0089	0	2.40E-05	-4.80E-05	0.00E+00	8.54E-05	-0.00017	r_0062
26	r_0090	0	4.80E-05	0	0	0.000171	0	r_0063
27	r_0091	0.029945	0.0300867	0.029847	0.02369	0.024193	0.023339	r_0064
28	r_0092	0	0	-4.80E-05	0	0	-0.00017	r_0064
29	r_0093	0	4.80E-05	0	0	0.000171	0	r_0064
30	r_0094	0	0	0	0	0	0	r_0064
31	r_0095	0	2.41E-06	0	0.00E+00	8.59E-06	0	r_0065
32	r_0096	0.049357	0.0493591	0.049357	0.053159	0.053167	0.053158	r_0066
33	r_0097	0.049357	0.0493591	0.049357	0.053159	0.053167	0.053158	r_0067
34	r_0099	0	0	0	0	0	0	r_0068
35	r_0100	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0069
36	r_0101	0	2.34E-06	0	0.00E+00	8.32E-06	0	r_0072
37	r_0102	0	1.33E-05	0	0.00E+00	4.52E-05	0	r_0073
38	r_0103	0	1.32E-05	0	0.00E+00	4.68E-05	0	r_0073
39	r_0104	0.003616	0.0036362	0.003603	0.003895	0.003921	0.003848	r_0074
40	r_0105	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0075
41	r_0106	0	1.49E-06	0	0.00E+00	5.31E-06	0	r_0076
42	r_0107	0	1.49E-06	0	0.00E+00	5.31E-06	0	r_0076
43	r_0108	0	0	0	0	0	0	r_0077
44	r_0109	0.01403	0.0140539	0.013981	0.01511	0.015197	0.015058	r_0078
45	r_0111	0	3.20E-05	0	0	0.000114	0	r_0078
46	r_0112	0.021043	0.0211073	0.020998	0.022664	0.022892	0.022615	r_0079
47	r_0113	0	4.84E-05	0	0	0.000171	0	r_0080
48	r_0114	0	0	0	0	0	0	r_0080
49	r_0115	0.028629	0.0286578	0.028437	0.030834	0.030937	0.03015	r_0081
50	r_0116	0	0	0	0	0	0	r_0082
51	r_0117	0	0	0	0	0	0	r_0083

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2	r_0118	0.028629	0.0286578	0.028437	0.030834	0.030937	0.03015	r_0084
3	r_0119	0	1.48E-05	0	0.00E+00	5.26E-05	0	r_0085
4	r_0120	0	1.49E-06	0	0.00E+00	5.31E-06	0	r_0088
5	r_0121	0	1.49E-06	0	0.00E+00	5.31E-06	0	r_0089
6	r_0122	0	2.34E-06	0	0.00E+00	8.32E-06	0	r_0090
7	r_0123	0	1.33E-05	0	0.00E+00	4.52E-05	0	r_0090
8	r_0124	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0091
9	r_0125	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0091
10	r_0126	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0092
11	r_0127	7.14E-05	9.89E-05	0.00E+00	7.69E-05	1.75E-04	0	r_0092
12	r_0128	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0093
13	r_0129	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0095
14	r_0130	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0095
15	r_0131	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0095
16	r_0132	0	8.18E-05	0	0	0.000156	0	r_0096
17	r_0133	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0097
18	r_0134	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0097
19	r_0135	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0100
20	r_0137	0	0	0	0	0	0	r_0101
21	r_0138	0	1.31E-06	0	0.00E+00	4.68E-06	0	r_0102
22	r_0139	0	1.34E-06	0	0.00E+00	4.77E-06	0	r_0103
23	r_0140	0	3.31E-05	0	0	0.000118	0	r_0104
24	r_0142	0.001734	0.0017818	0.001701	0.001867	0.002038	0.001749	r_0105
25	r_0143	0	3.31E-05	0	0	0.000118	0	r_0106
26	r_0144	0.001734	0.0017513	0.001722	0.001867	0.00193	0.001824	r_0107
27	r_0145	0	1.34E-06	0	0.00E+00	4.77E-06	0	r_0108
28	r_0146	0	0	0	0	0	0	r_0109
29	r_0147	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0109
30	r_0148	0.513162	0.5132253	0.513119	0.471244	0.471469	0.471195	r_0111
31	r_0149	0	4.84E-05	0	0	0.000171	0	r_0112
32	r_0150	0	3.87E-05	0	0	0.000137	0	r_0112
33	r_0151	0.023833	0.0238353	0.023833	0.00938	0.009388	0.00938	r_0113
34	r_0152	0.025321	0.0253538	0.025321	0.010982	0.0111	0.010982	r_0114
35	r_0153	0.025321	0.0253538	0.025321	0.010982	0.0111	0.010982	r_0115
36	r_0154	0.005041	0.0050534	0.005041	0.00543	0.005473	0.00543	r_0116
37	r_0155	0	0	0	0	0	0	r_0116
38	r_0156	0	6.861E-05	0	0	0.000244	0	r_0117
39	r_0157	0.040365	0.0403653	0.040365	0.043474	0.043474	0.043474	r_0118
40	r_0158	0	1.23E-06	0	0.00E+00	4.38E-06	0	r_0119
41	r_0159	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0120
42	r_0160	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0121
43	r_0161	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0122
44	r_0162	0	9.57E-07	0	0.00E+00	3.40E-06	0	r_0123
45	r_0163	0	1000	0	0.867614	1000	0	r_0124
46	r_0164	0	0	0	0	0	0	r_0125
47	r_0165	0	1000	0	0.867614	1000	0	r_0126
48	r_0166	0	1.60E-06	0	0.00E+00	5.70E-06	0	r_0127
49	r_0167	0	1.60E-06	0	0.00E+00	5.70E-06	0	r_0127
50	r_0168	0	1.58E-06	0	0.00E+00	5.61E-06	0	r_0128
51	r_0169	0	1.17E-06	0	0.00E+00	4.15E-06	0	r_0129
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2	r_0170	0	1.17E-06	0	0.00E+00	4.15E-06	0	r_0130
3	r_0171	0	1.15E-06	0	0.00E+00	4.10E-06	0	r_0131
4	r_0172	0	9.33E-07	0	0.00E+00	3.32E-06	0	r_0132
5	r_0173	0.016002	0.0160477	0.015895	0.017235	0.017397	0.016855	r_0132
6	r_0174	0	3.20E-05	0	0	0.000114	0	r_0133
7	r_0175	0	3.69E-05	0	0	0.000131	0	r_0134
8	r_0176	0	0	0	0	0	0	r_0135
9	r_0177	0	0	0	0	0	0	r_0137
10	r_0178	0	0	0	0	0	0	r_0138
11	r_0179	0	1.71E-06	0	0.00E+00	6.09E-06	0	r_0139
12	r_0180	0	1.71E-06	0	0.00E+00	6.09E-06	0	r_0140
13	r_0181	0	1.69E-06	0	0.00E+00	6.00E-06	0	r_0142
14	r_0182	0	2.20E-06	0	0.00E+00	7.82E-06	0	r_0143
15	r_0183	0	2.20E-06	0	0.00E+00	7.82E-06	0	r_0144
16	r_0184	0	2.15E-06	0	0.00E+00	7.66E-06	0	r_0145
17	r_0185	0	0	0	0	0	0	r_0146
18	r_0186	0	9.37E-07	0	0.00E+00	3.33E-06	0	r_0147
19	r_0187	0	9.37E-07	0	0.00E+00	3.33E-06	0	r_0148
20	r_0188	0	0	0	0	0	0	r_0149
21	r_0189	0	0	0	0	0	0	r_0150
22	r_0190	0	0	0	0	0	0	r_0151
23	r_0191	0	7.75E-06	0	0.00E+00	2.76E-05	0	r_0152
24	r_0192	0	0	0	0	0	0	r_0153
25	r_0193	0	1.75E-05	0	0.00E+00	6.21E-05	0	r_0154
26	r_0194	0	1.75E-05	0	0.00E+00	6.21E-05	0	r_0155
27	r_0195	0.002059	0.0020762	0.002059	0.002217	0.002279	0.002217	r_0156
28	r_0198	0	0	0	0	0	0	r_0157
29	r_0199	0	0	0	0	0	0	r_0158
30	r_0200	0	0	0	0	0	0	r_0158
31	r_0201	0	0	0	0	0	0	r_0159
32	r_0202	0.017622	0.0176288	0.017622	0.002691	0.002714	0.002691	r_0159
33	r_0203	0.017622	0.0176234	0.017622	0.002691	0.002695	0.002691	r_0160
34	r_0204	0	4.80E-05	0	0	0.000171	0	r_0160
35	r_0205	0	0	0	0	0	0	r_0161
36	r_0206	0	9.24E-06	0	0.00E+00	3.29E-05	0	r_0161
37	r_0207	0.014138	0.0141476	0.014138	0.015227	0.01526	0.015227	r_0162
38	r_0208	0.014138	0.0141476	0.014138	0.015227	0.01526	0.015227	r_0162
39	r_0209	0.014138	0.0141384	0.014138	0.015227	0.015227	0.015227	r_0163
40	r_0210	0	0	0	0	0	0	r_0164
41	r_0211	0.008948	0.008965	0.008948	0.009637	0.009699	0.009637	r_0164
42	r_0212	0.008948	0.0089476	0.008948	0.009637	0.009637	0.009637	r_0165
43	r_0213	0	0	0	0	0	0	r_0165
44	r_0214	0.009731	0.0097316	0.009731	0.01048	0.010484	0.01048	r_0166
45	r_0215	0.038254	0.0382755	0.038254	0.0412	0.041278	0.0412	r_0166
46	r_0216	-0.1464	1000	-0.14643	-0.1251	1000	-0.12521	r_0166
47	r_0217	0	1000	0	0	1000	0	r_0167
48	r_0218	0	3.01E-06	-9.97E-06	0.00E+00	1.07E-05	-3.55E-05	r_0167
49	r_0219	0.038254	0.0382755	0.038254	0.0412	0.041278	0.0412	r_0168
50	r_0220	0.026174	0.0261741	0.026174	0.02819	0.02819	0.02819	r_0168
51	r_0221	0	0	0	0	0	0	r_0168

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2	r_0222	0	4.80E-05	0	0	0.000171	0	r_0169
3	r_0223	0	0	0	0	0	0	r_0169
4	r_0224	0	0	0	0	0	0	r_0169
5	r_0225	0.005833	0.0058348	0.005833	0.006282	0.006288	0.006282	r_0170
6	r_0226	6.071165	6.0712383	6.071088	6.146186	6.146448	6.146048	r_0170
7	r_0227	0	4.80E-05	0	0	0.000171	0	r_0171
8	r_0228	0	0	0	0	0	0	r_0171
9	r_0229	0	0	0	0	0	0	r_0172
10	r_0230	0	0	0	0	0	0	r_0172
11	r_0231	0.0006	0.0006032	0.0006	0.000646	0.00065	0.000646	r_0173
12	r_0233	0	1.23E-05	0	0.00E+00	4.38E-05	0	r_0174
13	r_0234	0.000595	0.0005982	0.000595	0.000641	0.000645	0.000641	r_0175
14	r_0235	0.000595	0.0005982	0.000595	0.000641	0.000645	0.000641	r_0175
15	r_0236	0.000595	0.0005982	0.000595	0.000641	0.000645	0.000641	r_0176
16	r_0237	0.000595	0.0005982	0.000595	0.000641	0.000645	0.000641	r_0177
17	r_0238	0.000595	0.0005982	0.000595	0.000641	0.000645	0.000641	r_0178
18	r_0239	0.000595	0.0005982	0.000595	0.000641	0.000645	0.000641	r_0178
19	r_0240	0.000595	0.0005982	0.000595	0.000641	0.000645	0.000641	r_0179
20	r_0241	0.000595	0.0005982	0.000595	0.000641	0.000645	0.000641	r_0179
21	r_0242	0	1.23E-05	0	0.00E+00	4.38E-05	0	r_0179
22	r_0243	8.45E-06	2.08E-05	8.45E-06	9.10E-06	5.29E-05	9.10E-06	r_0180
23	r_0244	0.000564	0.0005674	0.000564	0.000608	0.000612	0.000608	r_0180
24	r_0249	0	0	0	0	0	0	r_0181
25	r_0250	0.023869	0.0238782	0.023869	0.025707	0.02574	0.025707	r_0181
26	r_0252	0	3.69E-05	0	0	0.000131	0	r_0182
27	r_0253	0	1.24E-05	0	0.00E+00	4.34E-05	0	r_0182
28	r_0254	0	3.69E-05	0	0	0.000131	0	r_0182
29	r_0255	0	4.67E-07	0	0.00E+00	1.66E-06	0	r_0183
30	r_0256	0	6.64E-06	0	0.00E+00	2.26E-05	0	r_0183
31	r_0259	0	2.46E-05	0	0.00E+00	4.17E-05	0	r_0184
32	r_0260	0	2.46E-05	0	0.00E+00	4.17E-05	0	r_0184
33	r_0261	0	2.46E-05	0	0.00E+00	4.17E-05	0	r_0185
34	r_0262	0	1.18E-05	0	0.00E+00	3.96E-05	0	r_0185
35	r_0263	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0186
36	r_0264	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0186
37	r_0265	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0186
38	r_0266	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0187
39	r_0267	0	1.23E-05	0	0.00E+00	4.09E-05	0	r_0187
40	r_0268	0	7.96E-06	0	0.00E+00	2.83E-05	0	r_0188
41	r_0269	0	8.21E-06	0	0.00E+00	2.92E-05	0	r_0189
42	r_0270	0	6.02E-06	0	0.00E+00	2.14E-05	0	r_0190
43	r_0271	0	0	0	0	0	0	r_0191
44	r_0272	8.80E-08	8.80E-08	8.80E-08	9.48E-08	9.48E-08	9.48E-08	r_0192
45	r_0273	0	4.22E-05	0	0	0.000114	0	r_0192
46	r_0274	0	4.22E-05	0	0	0.000114	0	r_0192
47	r_0278	0.020755	0.0207557	0.020754	0.022353	0.022357	0.022353	r_0192
48	r_0279	0.038377	0.0383784	0.038377	0.025044	0.025049	0.025044	r_0192
49	r_0280	0.094939	1000	-1000	0.102252	1000	-1000	r_0192
50	r_0281	0	0	0	0	0	0	r_0192
51	r_0282	0	0	0	0	0	0	r_0192
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2	r_0283	0	0	0	0	0	0	r_0193
3	r_0284	0	0	0	0	0	0	r_0194
4	r_0285	0	0	0	0	0	0	r_0195
5	r_0286	0	0	0	0	0	0	r_0195
6	r_0287	0	0	0	0	0	0	r_0195
7	r_0288	0	0	0	0	0	0	r_0195
8	r_0289	0	0	0	0	0	0	r_0198
9	r_0290	0	0	0	0	0	0	r_0198
10	r_0291	0	0	0	0	0	0	r_0198
11	r_0292	0	0	0	0	0	0	r_0198
12	r_0293	0	0	0	0	0	0	r_0198
13	r_0294	0	0	0	0	0	0	r_0198
14	r_0295	0	0	0	0	0	0	r_0199
15	r_0296	0	0	0	0	0	0	r_0201
16	r_0297	0	0	0	0	0	0	r_0202
17	r_0298	0	0	0	0	0	0	r_0203
18	r_0299	0	0	0	0	0	0	r_0203
19								
20	r_0300	0.089635	0.0897308	0.089621	0.096539	0.09688	0.096491	r_0204
21	r_0301	0	1.33E-05	0	0.00E+00	4.61E-05	0	r_0205
22	r_0302	0.094939	1000	-1000	0.102252	1000	-1000	r_0206
23	r_0303	-0.0053	1000	-1000	-0.00571	1000	-1000	r_0207
24	r_0304	8.80E-08	8.80E-08	8.80E-08	9.48E-08	9.48E-08	9.48E-08	r_0208
25	r_0306	0	4.80E-05	0	0	0.000171	0	r_0209
26	r_0307	0.00446	0.0044729	0.004362	0.004803	0.004848	0.004539	r_0210
27	r_0308	0	3.31E-05	0	0	0.000118	0	r_0211
28	r_0309	0.000581	0.0006138	0.000533	0.000625	0.000743	0.000454	r_0211
29	r_0310	0.000581	0.0006447	0.000533	0.000625	0.000853	0.000454	r_0212
30	r_0311	0	6.40E-05	0	0	0.000228	0	r_0213
31	r_0312	0	4.80E-05	0	0	0.000171	0	r_0214
32	r_0313	0.000581	0.0005807	0.000581	0.000625	0.000625	0.000625	r_0215
33	r_0314	0	1.28E-05	0	0.00E+00	4.56E-05	0	r_0216
34	r_0315	0	4.80E-05	0	0	0.000171	0	r_0217
35	r_0317	0.0006	0.0006032	0.0006	0.000646	0.00065	0.000646	r_0218
36	r_0318	0	1.28E-05	0	0.00E+00	4.56E-05	0	r_0219
37	r_0319	0	0	0	0	0	0	r_0220
38	r_0320	0	0	0	0	0	0	r_0221
39	r_0321	0	0	0	0	0	0	r_0222
40	r_0322	0	0	0	0	0	0	r_0223
41	r_0323	0	0	0	0	0	0	r_0224
42								
43	r_0326	0.000316	0.0003177	0.000218	0.00034	0.000345	7.62E-05	r_0225
44	r_0327	0	4.22E-05	0	0	0.000114	0	r_0226
45	r_0328	0	0	0	0	0	0	r_0226
46	r_0329	0	4.80E-05	0	0	0.000171	0	r_0226
47	r_0330	-0.00021	-0.000163	-0.00021	-2.27E-04	-5.65E-05	-0.00023	r_0226
48	r_0331	0	0	0	0	0	0	r_0226
49	r_0332	0	0	0	0	0	0	r_0226
50	r_0334	0	0	0	0	0	0	r_0226
51	r_0335	0	0	0	0	0	0	r_0226
52								
53	r_0340	3.79E-05	3.84E-05	1.05E-05	4.08E-05	4.25E-05	-5.68E-05	r_0226
54	r_0341	0	2.46E-05	-2.74E-05	0.00E+00	4.17E-05	-9.77E-05	r_0226
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2	r_0342	0	1000	0	0	1000	0	r_0226
3	r_0343	0	1000	0	0	1000	0	r_0226
4	r_0344	0.000317	0.0003177	0.000317	0.000341	0.000345	0.000341	r_0226
5	r_0345	0	0	0	0	0	0	r_0226
6	r_0346	0	0	0	0	0	0	r_0226
7	r_0347	0	0	0	0	0	0	r_0226
8	r_0348	0	0	0	0	0	0	r_0227
9	r_0349	-0.00973	-0.009731	-0.00973	-0.01048	-0.01048	-0.01048	r_0227
10	r_0350	0	0	0	0	0	0	r_0227
11	r_0351	0	0	0	0	0	0	r_0227
12	r_0352	0.049357	0.0493591	0.049357	0.053159	0.053167	0.053158	r_0227
13	r_0353	0.016954	0.0169554	0.016954	0.01826	0.018265	0.018259	r_0228
14	r_0354	0	8.732E-05	0	0	0.000311	0	r_0229
15	r_0355	0.001205	0.001212	0.001205	0.001298	0.001307	0.001298	r_0230
16	r_0356	0	0	0	0	0	0	r_0231
17	r_0357	0	4.80E-05	0	0	0.000171	0	r_0233
18	r_0358	0	4.80E-05	0	0	0.000171	0	r_0234
19	r_0359	0	0	0	0	0	0	r_0235
20	r_0360	0	0	0	0	0	0	r_0236
21	r_0361	0.071079	0.0710792	0.071079	0.076554	0.076554	0.076553	r_0237
22	r_0362	0.071079	0.0710792	0.071079	0.076554	0.076554	0.076553	r_0238
23	r_0363	0	1.00E-06	0	0.00E+00	3.56E-06	0	r_0239
24	r_0364	1.09E-06	9.84E-05	0.00E+00	1.17E-06	2.65E-04	0	r_0240
25	r_0365	0	0	0	0	0	0	r_0241
26	r_0366	0.540524	0.5406194	0.54049	0.582157	0.582495	0.582035	r_0242
27	r_0368	0	0	0	0	0	0	r_0243
28	r_0369	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0244
29	r_0370	0	0	0	0	0	0	r_0249
30	r_0373	0	0	0	0	0	0	r_0249
31	r_0399	0	2.74E-05	-6.30E-07	0.00E+00	9.77E-05	-2.24E-06	r_0250
32	r_0400	0	2.74E-05	-1.75E-05	0.00E+00	9.77E-05	-6.21E-05	r_0250
33	r_0402	0	2.74E-05	-1.75E-05	0.00E+00	9.77E-05	-6.21E-05	r_0250
34	r_0410	0	2.74E-05	-7.19E-07	0.00E+00	9.77E-05	-2.56E-06	r_0252
35	r_0412	0	2.74E-05	-1.75E-05	0.00E+00	9.77E-05	-6.21E-05	r_0252
36	r_0436	8.80E-08	8.80E-08	8.80E-08	9.48E-08	9.48E-08	9.48E-08	r_0253
37	r_0437	0	0	0	0	0	0	r_0254
38	r_0438	1.909946	1.9099539	1.909927	1.936979	1.937008	1.93694	r_0255
39	r_0439	3.819891	3.8199078	3.819854	3.873958	3.874017	3.87388	r_0256
40	r_0440	0	0	0	0	0	0	r_0259
41	r_0441	2.975965	3.810178	0	3.863477	3.863538	0	r_0260
42	r_0442	0	0.0001067	0	0	0.00038	0	r_0261
43	r_0443	0	0	0	0	0	0	r_0262
44	r_0445	1.142322	1.1423949	1.142138	1.166824	1.167079	1.166167	r_0263
45	r_0446	-1.12634	-1.126153	-1.12641	-1.1659	-1.16524	-1.16615	r_0263
46	r_0447	0	0	-9.6E-05	0	0	-0.00034	r_0263
47	r_0448	0	4.80E-05	0	0	0.000171	0	r_0264
48	r_0449	0	4.80E-05	0	0	0.000171	0	r_0264
49	r_0450	0.608199	0.608249	-4.80E-05	0	0.619059	-0.00017	r_0264
50	r_0451	0	0.0001921	-7.04E-07	0	0.000684	-7.58E-07	r_0265
51	r_0452	0.063292	0.0633605	0.0631	0.03559	0.035834	0.034906	r_0265
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2	r_0453	0.009731	0.0097316	0.009731	0.01048	0.010484	0.01048	r_0265
3	r_0454	0.834195	3.810178	0	0	3.863538	0	r_0266
4	r_0455	0	0	0	0	0	0	r_0266
5	r_0457	0	0	0	0	0	0	r_0266
6	r_0458	0	0	0	0	0	0	r_0267
7	r_0459	0	1000	0	0	1000	0	r_0268
8	r_0460	0	0	0	0	0	0	r_0269
9	r_0461	0	0	0	0	0	0	r_0270
10	r_0462	0.001205	0.001212	0.001205	0.001298	0.001307	0.001298	r_0271
11	r_0463	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0271
12	r_0464	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0272
13	r_0465	0	4.80E-05	0	0	0.000171	0	r_0272
14	r_0466	0.029945	0.0300867	0.029847	0.02369	0.024193	0.023339	r_0272
15	r_0467	0.720357	0.7204559	0.720216	0.70738	0.707733	0.706878	r_0273
16	r_0468	0	0.0001921	0	0	0.000684	0	r_0274
17	r_0469	0	4.57E-05	0	0	0.000163	0	r_0278
18	r_0470	0	0.0001067	0	0	0.00038	0	r_0279
19	r_0471	1.046435	1.0465235	1.046342	1.046427	1.046741	1.046095	r_0280
20	r_0472	0	8.732E-05	0	0	0.000311	0	r_0281
21	r_0473	0	0.0001921	0	0	0.000684	0	r_0281
22	r_0475	0	4.80E-05	0	0	0.000171	0	r_0282
23	r_0476	0.13268	0.1327674	0.13268	0.077745	0.078055	0.077745	r_0282
24	r_0477	8.80E-08	4.81E-05	8.80E-08	9.48E-08	1.71E-04	9.48E-08	r_0283
25	r_0478	0.009273	0.0092731	0.009273	0.009987	0.009987	0.009987	r_0283
26	r_0479	0.026552	0.0265524	0.026552	0.028598	0.028598	0.028597	r_0284
27	r_0480	0	0	0	0	0	0	r_0284
28	r_0481	0	8.99E-07	0	0.00E+00	3.20E-06	0	r_0285
29	r_0482	0	0	0	0	0	0	r_0285
30	r_0483	0	8.99E-07	0	0.00E+00	3.20E-06	0	r_0286
31	r_0484	0	0	0	0	0	0	r_0286
32	r_0485	0	0	0	0	0	0	r_0287
33	r_0486	1.193469	1.1935038	1.193424	1.221075	1.221197	1.220912	r_0287
34	r_0487	0	8.732E-05	0	0	0.000311	0	r_0288
35	r_0488	0	4.80E-05	0	0	0.000171	0	r_0288
36	r_0489	0	8.732E-05	0	0	0.000311	0	r_0289
37	r_0490	0.834195	3.810178	0	0	3.863538	0	r_0289
38	r_0491	0	3.8111079	0	0.000908	3.864756	0	r_0290
39	r_0492	0.835039	3.8111079	0	0	3.864756	0	r_0290
40	r_0497	0	1.13E-05	0	0.00E+00	3.97E-05	0	r_0291
41	r_0499	0.023833	0.0238353	0.023833	0.00938	0.009388	0.00938	r_0291
42	r_0500	0	0	0	0	0	0	r_0292
43	r_0501	0	0.5685185	0	0.580527	0.580654	0	r_0292
44	r_0502	1.186348	1.18642	1.186163	1.197951	1.198206	1.197294	r_0293
45	r_0503	-0.56848	-0.56839	-0.56852	-0.58053	-0.5802	-0.58065	r_0293
46	r_0504	0	0.5685185	0	0	0.580654	0	r_0294
47	r_0505	7.04E-07	5.69E-01	0.00E+00	7.58E-07	5.81E-01	0	r_0294
48	r_0506	0.568482	0.5685185	0	0	0.580654	0	r_0295
49	r_0507	0.568482	0.5685185	0	0	0.580654	0	r_0295
50	r_0508	0.568482	0.5685185	0	0	0.580654	0	r_0296
51	r_0509	0	0.5685185	0	0	0.580654	0	r_0296

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2	r_0510	0.045618	0.0456817	0.045618	0.049131	0.049359	0.049131	r_0297
3	r_0511	0	6.40E-05	0	0	0.000228	0	r_0297
4	r_0512	0.025549	0.0255494	0.025549	0.027517	0.027517	0.027517	r_0298
5	r_0514	0.004345	0.004356	0.004345	0.00468	0.004718	0.00468	r_0298
6	r_0518	0	0	0	0	0	0	r_0299
7	r_0519	0	0	0	0	0	0	r_0299
8	r_0520	0	0	0	0	0	0	r_0300
9	r_0521	0	0	0	0	0	0	r_0300
10	r_0522	0	0	0	0	0	0	r_0301
11	r_0523	0	0	0	0	0	0	r_0302
12	r_0524	0	0	0	0	0	0	r_0303
13	r_0525	8.71E-05	8.71E-05	8.71E-05	9.38E-05	9.38E-05	9.38E-05	r_0304
14	r_0526	0	1.07E-05	0	0.00E+00	3.80E-05	0	r_0306
15	r_0527	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0306
16	r_0528	0	0.0003463	0	0.000321	0.000492	0	r_0307
17	r_0529	0.000298	0.0003463	0	0	0.000492	0	r_0307
18	r_0530	8.80E-08	8.80E-08	8.80E-08	9.48E-08	9.48E-08	9.48E-08	r_0308
19	r_0531	8.80E-08	8.80E-08	8.80E-08	9.48E-08	9.48E-08	9.48E-08	r_0309
20	r_0532	0	0	0	0	0	0	r_0310
21	r_0533	0	0	0	0	0	0	r_0311
22	r_0534	1	1.0000349	0.999998	1	1.000124	0.999993	r_0312
23	r_0535	0	0	0	0	0	0	r_0313
24	r_0536	0.005833	0.0058348	0.005833	0.006282	0.006288	0.006282	r_0314
25	r_0537	0.005833	0.0058348	0.005833	0.006282	0.006288	0.006282	r_0315
26	r_0538	0.005833	0.0058348	0.005833	0.006282	0.006288	0.006282	r_0317
27	r_0539	0.005833	0.0058331	0.005833	0.006282	0.006282	0.006282	r_0317
28	r_0540	0	0	0	0	0	0	r_0318
29	r_0541	0	0	0	0	0	0	r_0319
30	r_0542	0.02518	0.0251814	0.02518	0.027119	0.027125	0.027119	r_0320
31	r_0543	0	0	0	0	0	0	r_0321
32	r_0544	0	1.75E-05	0	0.00E+00	6.21E-05	0	r_0322
33	r_0545	0.02518	0.0251814	0.02518	0.027119	0.027125	0.027119	r_0323
34	r_0546	0.038254	0.0382755	0.038147	0.0412	0.041278	0.04082	r_0326
35	r_0547	0	0.0001067	0	0	0.00038	0	r_0327
36	r_0548	0.033213	0.0332605	0.033148	0.035771	0.035941	0.035543	r_0328
37	r_0549	0.005041	0.0051053	0.004993	0.00543	0.005657	0.005259	r_0329
38	r_0550	0	8.99E-07	0	0.00E+00	3.20E-06	0	r_0330
39	r_0551	0	0	0	0	0	0	r_0331
40	r_0552	0	8.62E-06	0	0.00E+00	3.07E-05	0	r_0332
41	r_0553	0	1.92E-05	0	0.00E+00	6.84E-05	0	r_0334
42	r_0554	0	0	0	0	0	0	r_0335
43	r_0555	0	0	0	0	0	0	r_0340
44	r_0556	0	1.75E-05	0	0.00E+00	6.21E-05	0	r_0341
45	r_0557	8.80E-08	8.80E-08	8.80E-08	9.48E-08	9.48E-08	9.48E-08	r_0342
46	r_0558	0.003616	0.0036362	0.003616	0.003895	0.003921	0.003895	r_0343
47	r_0559	0	1.32E-05	0	0.00E+00	4.68E-05	0	r_0344
48	r_0560	0.003616	0.0036362	0.003603	0.003895	0.003921	0.003848	r_0345
49	r_0561	0	1.75E-05	0	0.00E+00	6.21E-05	0	r_0346
50	r_0562	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0347
51	r_0563	0.005833	0.0058348	0.005833	0.006282	0.006288	0.006282	r_0348
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2	r_0564	0.005833	0.0058348	0.005833	0.006282	0.006288	0.006282	r_0349
3	r_0565	0.004345	0.0043476	0.004345	0.00468	0.004688	0.00468	r_0350
4	r_0566	0.017622	0.0176288	0.017622	0.002691	0.002714	0.002691	r_0351
5	r_0567	0	9.65E-07	0	0.00E+00	3.44E-06	0	r_0352
6	r_0568	0	0.0001921	0	0	0.000684	0	r_0353
7	r_0569	0.830825	0.8308881	0.830632	0.813375	0.813597	0.812685	r_0354
8	r_0570	0.029666	0.0296683	0.029666	0.015662	0.015671	0.015662	r_0354
9	r_0571	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_0355
10	r_0572	0	0	0	0	0	0	r_0356
11	r_0573	0	0	0	0	0	0	r_0357
12	r_0574	0	0	0	0	0	0	r_0358
13	r_0575	0	0	0	0	0	0	r_0359
14	r_0596	0	0	0	0	0	0	r_0360
15	r_0597	0	0	0	0	0	0	r_0361
16	r_0598	0	0	0	0	0	0	r_0362
17	r_0599	0	0	0	0	0	0	r_0362
18	r_0600	0	0	0	0	0	0	r_0362
19	r_0601	0	0	0	0	0	0	r_0362
20	r_0602	0	0	0	0	0	0	r_0362
21	r_0603	0	0	0	0	0	0	r_0363
22	r_0604	0	0	0	0	0	0	r_0364
23	r_0605	0	0	0	0	0	0	r_0365
24	r_0606	0	0	0	0	0	0	r_0366
25	r_0607	0	0	0	0	0	0	r_0366
26	r_0608	0	0	0	0	0	0	r_0368
27	r_0609	0	0	0	0	0	0	r_0368
28	r_0610	0	0	0	0	0	0	r_0369
29	r_0611	0	0	0	0	0	0	r_0370
30	r_0612	0	0	0	0	0	0	r_0370
31	r_0613	0	0	0	0	0	0	r_0370
32	r_0614	0	0	0	0	0	0	r_0370
33	r_0615	0	0	0	0	0	0	r_0370
34	r_0616	0	0	0	0	0	0	r_0373
35	r_0617	0	0	0	0	0	0	r_0399
36	r_0618	0	0	0	0	0	0	r_0400
37	r_0619	0	0	0	0	0	0	r_0402
38	r_0620	0	0	0	0	0	0	r_0410
39	r_0621	0	0	0	0	0	0	r_0412
40	r_0622	0	0	0	0	0	0	r_0436
41	r_0623	0	0	0	0	0	0	r_0437
42	r_0624	0	0	0	0	0	0	r_0437
43	r_0625	0	0	0	0	0	0	r_0437
44	r_0626	0	0	0	0	0	0	r_0438
45	r_0627	0	0	0	0	0	0	r_0438
46	r_0628	0	0	0	0	0	0	r_0438
47	r_0629	0	0	0	0	0	0	r_0438
48	r_0630	0	0	0	0	0	0	r_0438
49	r_0631	0	0	0	0	0	0	r_0438
50	r_0632	0	0	0	0	0	0	r_0438
51	r_0633	0	0	0	0	0	0	r_0438
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2	r_0634	0	0	0	0	0	0		r_0438
3	r_0635	0	0	0	0	0	0		r_0438
4	r_0636	0	0	0	0	0	0		r_0438
5	r_0637	0	0	0	0	0	0		r_0438
6	r_0638	0	0	0	0	0	0		r_0438
7	r_0639	0	0	0	0	0	0		r_0438
8	r_0640	0	0	0	0	0	0		r_0439
9	r_0641	0	0	0	0	0	0		r_0439
10	r_0642	0	0	0	0	0	0		r_0439
11	r_0643	0	0	0	0	0	0		r_0439
12	r_0644	0	0	0	0	0	0		r_0439
13	r_0645	0	0	0	0	0	0		r_0439
14	r_0646	0	6.12E-05	0	0	0.000134	0		r_0439
15	r_0647	0	6.12E-05	0	0	0.000134	0		r_0439
16	r_0648	0	6.12E-05	0	3.59E-05	0.000134	0		r_0439
17	r_0649	0	6.12E-05	0	0	0.000134	0		r_0439
18	r_0650	0	6.12E-05	0	0	0.000134	0		r_0439
19	r_0651	0	6.12E-05	0	0	0.000134	0		r_0439
20	r_0652	0	6.12E-05	0	0	0.000134	0		r_0440
21	r_0653	3.33E-05	6.12E-05	0	0	0.000134	0		r_0441
22	r_0654	0	6.12E-05	0	0	0.000134	0		r_0442
23	r_0655	0	6.12E-05	0	0	0.000134	0		r_0443
24	r_0656	0	2.74E-05	0	0.00E+00	9.77E-05	0		r_0445
25	r_0657	0	2.74E-05	0	0.00E+00	9.77E-05	0		r_0446
26	r_0658	0	0.0002401	0	0	0.000854	0		r_0447
27	r_0659	-0.0053	-0.005112	-0.00554	-0.00571	-0.00503	-0.00657		r_0448
28	r_0661	0	3.01E-06	0	0.00E+00	1.07E-05	0		r_0449
29	r_0662	0	6.861E-05	0	0	0.000244	0		r_0450
30	r_0663	-0.01695	1000	-0.01696	-0.01826	1000	-0.01827		r_0451
31	r_0664	0	0	-1000	0	0	-1000		r_0452
32	r_0665	0.016954	0.0169538	0.016954	0.01826	0.01826	0.018259		r_0453
33	r_0666	0	0	0	0	0	0		r_0454
34	r_0667	0.001205	0.001212	0.001205	0.001298	0.001307	0.001298		r_0455
35	r_0668	0	0	0	0	0	0		r_0457
36	r_0669	0.016954	0.0169554	0.016954	0.01826	0.018265	0.018259		r_0458
37	r_0670	0	6.36E-06	0	0.00E+00	2.26E-05	0		r_0459
38	r_0671	0.015124	0.0151242	0.015124	0	0	0		r_0460
39	r_0672	0	0	-1000	0	0	-1000		r_0462
40	r_0673	0	1000	0	0	1000	0		r_0463
41	r_0674	0	0	-0.00019	0	0	-0.00068		r_0464
42	r_0675	0	0	0	0	0	0		r_0466
43	r_0676	0	0	0	0	0	0		r_0467
44	r_0678	0.02518	0.0251814	0.02518	0.027119	0.027125	0.027119		r_0468
45	r_0679	0	1.75E-05	0	0.00E+00	6.21E-05	0		r_0469
46	r_0680	0	1.75E-05	0	0.00E+00	6.21E-05	0		r_0470
47	r_0681	0	0	0	0	0	0		r_0471
48	r_0682	0	0	0	0	0	0		r_0471
49	r_0683	0	0	0	0	0	0		r_0472
50	r_0687	0	0	0	0	0	0		r_0473
51	r_0688	0	1.63E-05	0	0.00E+00	5.79E-05	0		r_0476
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2	r_0689	0	3.31E-05	0	0	0.000118	0	r_0477
3	r_0690	0	0	0	0	0	0	r_0478
4	r_0691	0	0	0	0	0	0	r_0479
5	r_0692	0.016373	0.0164211	0	0.017634	0.017805	0	r_0480
6	r_0693	0	0.0164211	0	0	0.017805	0	r_0481
7	r_0694	0.015124	0.0151301	0.015124	0.00E+00	2.26E-05	0	r_0481
8	r_0695	0	1.11E-06	0	0.00E+00	3.96E-06	0	r_0481
9	r_0696	0	1.63E-05	0	0.00E+00	5.79E-05	0	r_0481
10	r_0697	0	1.92E-05	0	0.00E+00	6.84E-05	0	r_0481
11	r_0698	0.000603	0.000606	0.000603	0.000649	0.000653	0.000649	r_0482
12	r_0699	0	1000	-1000	0	1000	-1000	r_0482
13	r_0700	-0.02608	1000	-1000	-0.02809	1000	-1000	r_0483
14	r_0701	0.026077	0.0260773	0.026077	0.028086	0.028086	0.028086	r_0483
15	r_0702	0	0	0	0	0	0	r_0483
16	r_0703	0	0	0	0	0	0	r_0483
17	r_0704	0	0	0	0	0	0	r_0483
18	r_0705	0	0	0	0	0	0	r_0484
19	r_0706	0	0	0	0	0	0	r_0485
20	r_0707	0	0	0	0	0	0	r_0486
21	r_0708	0	0	0	0	0	0	r_0486
22	r_0711	0.02518	0.0251799	0.02518	0.027119	0.027119	0.027119	r_0486
23	r_0712	0	0	0	0	0	0	r_0487
24	r_0713	0.089635	1000	0.089443	0.096539	1000	0.095855	r_0488
25	r_0714	-0.02634	-0.026151	-1000	-0.06095	-0.06027	-1000	r_0489
26	r_0715	0	0	-1.33E-05	0	0	-4.52E-05	r_0489
27	r_0716	0	2.13E-05	0	0.00E+00	7.60E-05	0	r_0490
28	r_0717	0	9.97E-06	0	0.00E+00	3.55E-05	0	r_0491
29	r_0718	0	9.605E-05	0	0	0.000342	0	r_0491
30	r_0719	0	0.0001601	0	0	0.00057	0	r_0492
31	r_0721	0	0	0	0	0	0	r_0497
32	r_0722	0.071117	0.0711174	0.071115	0.076595	0.076596	0.076588	r_0499
33	r_0723	-0.07112	-0.071115	-0.07112	-0.07659	-0.07659	-0.0766	r_0501
34	r_0724	0	9.605E-05	0	0	0.000342	0	r_0501
35	r_0725	1.179836	1.1799089	1.179652	1.190938	1.191194	1.190281	r_0501
36	r_0726	0.001734	0.0017513	0.001722	0.001867	0.00193	0.001824	r_0501
37	r_0727	0.006194	0.0061983	0.006182	0.006672	0.006682	0.006628	r_0502
38	r_0728	0	0	0	0	0	0	r_0503
39	r_0729	0.004461	0.0044606	0.004461	0.004804	0.004804	0.004804	r_0504
40	r_0730	0	0	0	0	0	0	r_0504
41	r_0731	0	0.0001067	0	0	0.00038	0	r_0504
42	r_0732	1.179836	1.1799089	1.179652	1.190938	1.191194	1.190281	r_0504
43	r_0733	0	9.605E-05	0	0	0.000342	0	r_0505
44	r_0734	0	0	0	0	0	0	r_0505
45	r_0735	0	6.40E-05	0	0	0.000228	0	r_0505
46	r_0736	0.003616	0.0036361	0.003552	0.003895	0.00392	0.003667	r_0505
47	r_0737	0	6.40E-05	0	0	0.000228	0	r_0505
48	r_0738	0	6.40E-05	0	0	0.000228	0	r_0505
49	r_0739	0.003616	0.0036361	0.003616	0.003895	0.00392	0.003895	r_0506
50	r_0747	3.79E-05	3.84E-05	1.33E-05	4.08E-05	4.24E-05	0	r_0506
51	r_0748	0	2.25E-05	0	0.00E+00	4.03E-05	0	r_0506
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2	r_0749	0	2.46E-05	0	0.00E+00	4.17E-05	0	r_0506
3	r_0750	0	1.18E-05	0	0.00E+00	3.96E-05	0	r_0507
4	r_0751	0	2.46E-05	0	0.00E+00	4.17E-05	0	r_0507
5	r_0752	0	1.18E-05	0	0.00E+00	3.96E-05	0	r_0507
6	r_0753	0	1.23E-05	0	0.00E+00	4.09E-05	0	r_0507
7	r_0754	0	7.96E-06	0	0.00E+00	2.83E-05	0	r_0508
8	r_0755	0	8.21E-06	0	0.00E+00	2.92E-05	0	r_0508
9	r_0756	0	6.02E-06	0	0.00E+00	2.14E-05	0	r_0508
10	r_0757	0.000316	0.0003443	0.00028	0.000341	0.000439	0.000292	r_0508
11	r_0758	0.000283	0.0002842	0.00028	0.000305	0.000309	0.000292	r_0509
12	r_0759	0.028629	0.0286578	0.028437	0.030834	0.030937	0.03015	r_0509
13	r_0760	8.80E-08	8.80E-08	8.80E-08	9.48E-08	9.48E-08	9.48E-08	r_0509
14	r_0761	0	0	0	0	0	0	r_0509
15	r_0762	0.015124	0.0151301	0.015124	0.00E+00	2.26E-05	0	r_0510
16	r_0763	0	5.56E-07	0	0.00E+00	1.98E-06	0	r_0510
17	r_0764	0	0	0	0	0	0	r_0510
18	r_0765	0	0.0001067	0	0	0	0	r_0510
19	r_0766	0	0	0	0	0	0	r_0511
20	r_0767	0	0	0	0	0	0	r_0512
21	r_0768	0.015124	0.0151242	0.015124	0	0	0	r_0512
22	r_0769	0	0	0	0	0	0	r_0514
23	r_0770	0	3.810178	0	0	3.863538	0	r_0518
24	r_0771	0.015124	0.0151242	0.015017	0	0	0	r_0519
25	r_0772	0	0	0	0	0	0	r_0519
26	r_0773	0	3.810178	0	0	3.863538	0	r_0520
27	r_0774	0	0	0	0	0	0	r_0521
28	r_0775	0	0	0	0	0	0	r_0522
29	r_0781	0	0	0	0	0	0	r_0523
30	r_0782	0	0	0	0	0	0	r_0523
31	r_0783	0	0	0	0	0	0	r_0524
32	r_0784	0	0	0	0	0	0	r_0525
33	r_0785	0.015124	0.0151242	0.015124	0	0	0	r_0526
34	r_0786	0.015124	0.0151242	0.015124	0	0	0	r_0527
35	r_0787	0	0	0	0	0	0	r_0528
36	r_0788	0	4.80E-05	0	0	0.000171	0	r_0529
37	r_0789	0	4.80E-05	0	0	0.000171	0	r_0530
38	r_0790	0	4.80E-05	0	0	0.000171	0	r_0530
39	r_0791	0	0	0	0	0	0	r_0530
40	r_0792	0.003089	0.0031708	0.00305	0.003327	0.003534	0.00319	r_0531
41	r_0793	0	1.96E-05	0	0.00E+00	6.98E-05	0	r_0532
42	r_0795	0	6.40E-05	0	0	0.000228	0	r_0532
43	r_0796	0.000298	0.0003463	0	0	0.000492	0	r_0532
44	r_0797	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0532
45	r_0798	0	4.80E-05	0	0	0.000171	0	r_0532
46	r_0799	0	1.00E-06	0	0.00E+00	3.56E-06	0	r_0532
47	r_0800	0.096525	0.0965887	0.096523	0.087671	0.087898	0.087664	r_0532
48	r_0801	0	4.80E-05	0	0	0.000171	0	r_0533
49	r_0802	0	0	0	0	0	0	r_0533
50	r_0803	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0534
51	r_0804	0	4.80E-05	0	0	0.000171	0	r_0534
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2	r_0805	0	4.80E-05	0	0	0.000171	0	r_0534
3	r_0806	0	7.38E-05	0	0	0.000199	0	r_0535
4	r_0807	0	4.80E-05	0	0	0.000171	0	r_0535
5	r_0810	0	0	0	0	0	0	r_0536
6	r_0811	0.251817	0.2518805	0.251816	0.271213	0.271439	0.271211	r_0537
7	r_0812	0	0	0	0	0	0	r_0538
8	r_0813	0.005041	0.0050414	0.004993	0.00543	0.005438	0.005259	r_0539
9	r_0815	0	0	0	0	0	0	r_0540
10	r_0816	0.014138	0.0141476	0.014138	0.015227	0.01526	0.015227	r_0541
11	r_0817	0	2.11E-06	0	0.00E+00	7.50E-06	0	r_0542
12	r_0818	0.028629	0.0286578	0.028437	0.030834	0.030937	0.03015	r_0543
13	r_0819	0.01449	0.0145194	0.014298	0.015606	0.01571	0.014923	r_0543
14	r_0820	-0.00973	-0.009731	-0.00973	-0.01048	-0.01048	-0.01048	r_0544
15	r_0821	0.009731	0.0097316	0.009731	0.01048	0.010484	0.01048	r_0544
16	r_0831	7.04E-07	9.68E-05	0.00E+00	7.58E-07	3.43E-04	0	r_0545
17	r_0832	7.04E-07	9.68E-05	0.00E+00	7.58E-07	3.43E-04	0	r_0546
18	r_0841	0	1.48E-05	0	0.00E+00	5.26E-05	0	r_0547
19	r_0842	0	0	0	0	0	0	r_0548
20	r_0843	0	9.33E-07	0	0.00E+00	3.32E-06	0	r_0549
21	r_0844	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0550
22	r_0845	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0550
23	r_0847	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0551
24	r_0848	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0551
25	r_0849	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0552
26	r_0850	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0552
27	r_0851	-0.03702	1000	-1000	-0.05616	1000	-1000	r_0553
28	r_0852	0.011781	0.0117805	0.011781	0.012688	0.012688	0.012688	r_0554
29	r_0853	0	0	0	0	0	0	r_0555
30	r_0854	0	1.21E-06	0	0.00E+00	4.30E-06	0	r_0556
31	r_0855	0.023833	0.0238353	0.023833	0.00938	0.009388	0.00938	r_0557
32	r_0882	8.80E-08	8.80E-08	8.80E-08	9.48E-08	9.48E-08	9.48E-08	r_0558
33	r_0883	0.005041	0.0050534	0.005041	0.00543	0.005473	0.00543	r_0558
34	r_0884	0	4.80E-05	0	0	0.000171	0	r_0559
35	r_0885	0	0	0	0	0	0	r_0560
36	r_0886	0.608199	0.608249	0	0	0.619059	0	r_0561
37	r_0887	0	0.608249	0	0.618883	0.619059	0	r_0561
38	r_0888	0.247356	0.2473832	0.247356	0.266408	0.266504	0.266406	r_0561
39	r_0889	0.029945	0.0300867	0.029847	0.02369	0.024193	0.023339	r_0562
40	r_0890	0	0	0	0	0	0	r_0563
41	r_0891	0.652945	0.6529809	0.652852	0.638917	0.639045	0.638588	r_0564
42	r_0892	1.193469	1.1935038	1.193424	1.221075	1.221197	1.220912	r_0565
43	r_0893	0.540524	0.5406194	0.54049	0.582157	0.582495	0.582035	r_0565
44	r_0902	-0.07112	-0.071115	-0.07112	-0.07659	-0.07659	-0.0766	r_0565
45	r_0903	0	1.75E-05	0	0.00E+00	6.21E-05	0	r_0566
46	r_0904	0.003616	0.0036361	0.003616	0.003895	0.00392	0.003895	r_0567
47	r_0905	0	0	0	0	0	0	r_0567
48	r_0906	0	0	0	0	0	0	r_0567
49	r_0907	0	2.74E-05	-4.80E-05	0.00E+00	9.77E-05	-0.00017	r_0568
50	r_0908	0.023833	0.0238353	0.023833	0.00938	0.009388	0.00938	r_0569
51	r_0909	0.005833	0.0058348	0.005833	0.006282	0.006288	0.006282	r_0570
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2	r_0910	0.005833	0.0058348	0.005833	0.006282	0.006288	0.006282		r_0570
3	r_0911	0.023833	0.0238353	0.023833	0.00938	0.009388	0.00938		r_0571
4	r_0912	0.029666	0.0296683	0.029666	0.015662	0.015671	0.015662		r_0572
5	r_0913	0.017622	0.0176288	0.017622	0.002691	0.002714	0.002691		r_0573
6	r_0914	0.023833	0.0238353	0.023833	0.00938	0.009388	0.00938		r_0574
7	r_0915	0.023833	0.0238353	0.023833	0.00938	0.009388	0.00938		r_0575
8	r_0916	0.072143	0.0721702	0.072143	0.028834	0.028931	0.028833		r_0596
9	r_0917	0.652945	0.6529809	0.652852	0.638917	0.639045	0.638588		r_0597
10	r_0918	0.652945	0.6529809	0.652852	0.638917	0.639045	0.638588		r_0598
11	r_0919	0	1000	0	0	1000	0		r_0599
12	r_0920	0	1000	0	0	1000	0		r_0600
13	r_0921	0	0	0	0	0	0		r_0601
14	r_0922	0	2.46E-05	0	0.00E+00	4.17E-05	0		r_0602
15	r_0929	0	0	0	0	0	0		r_0603
16	r_0935	3.52E-07	3.52E-07	3.52E-07	3.79E-07	3.79E-07	3.79E-07		r_0604
17	r_0936	0	0	0	0	0	0		r_0605
18	r_0937	0	9.33E-07	0	0.00E+00	3.32E-06	0		r_0606
19	r_0938	0.011781	0.0117817	0.011781	0.012688	0.012692	0.012688		r_0607
20	r_0939	0.008974	0.0089752	0.008974	0.009665	0.009669	0.009665		r_0608
21	r_0940	0	2.91E-05	0	0	0.000104	0		r_0609
22	r_0941	0.01449	0.0144903	0.01449	0.015606	0.015606	0.015606		r_0610
23	r_0942	4.40E-08	4.40E-08	4.40E-08	4.74E-08	4.74E-08	4.74E-08		r_0611
24	r_0943	0	0	0	0	0	0		r_0612
25	r_0949	0	2.74E-05	0	0.00E+00	9.77E-05	0		r_0613
26	r_0950	0	0	0	0	0	0		r_0614
27	r_0951	0	2.74E-05	-1.31E-06	0.00E+00	9.77E-05	-4.68E-06		r_0615
28	r_0953	0	0	0	0	0	0		r_0616
29	r_0954	0	0	0	0	0	0		r_0617
30	r_0955	0	0	0	0	0	0		r_0618
31	r_0956	0	0	0	0	0	0		r_0619
32	r_0957	0.01449	0.0145194	0.01449	0.015606	0.01571	0.015606		r_0620
33	r_0958	0.172741	0.1729007	0.172719	0.186046	0.186614	0.185969		r_0621
34	r_0959	0.016002	0.0160477	0.015951	0.017235	0.017397	0.017125		r_0622
35	r_0960	0	2.41E-06	0	0.00E+00	8.59E-06	0		r_0623
36	r_0961	0.151741	0.1518367	0.151694	0.163428	0.163769	0.163264		r_0624
37	r_0962	0.463771	0.4638657	0.463736	0.532069	0.532407	0.531947		r_0625
38	r_0963	0	0	0	0	0	0		r_0626
39	r_0965	0	0	0	0	0	0		r_0627
40	r_0966	0	0	0	0	0	0		r_0628
41	r_0967	0.000174	0.0001742	0.000174	0.000188	0.000188	0.000188		r_0629
42	r_0968	8.71E-05	8.71E-05	8.71E-05	9.38E-05	9.38E-05	9.38E-05		r_0630
43	r_0969	0	4.80E-05	0	0	0.000171	0		r_0631
44	r_0970	0	0.0003167	0	0	0.000341	0		r_0632
45	r_0971	0	4.22E-05	0	0	0.000114	0		r_0633
46	r_0972	0	4.80E-05	0	0	0.000171	0		r_0634
47	r_0973	1.09E-06	9.84E-05	0.00E+00	1.17E-06	2.65E-04	0		r_0635
48	r_0974	3.17E-04	3.17E-04	0.00E+00	3.41E-04	3.41E-04	0		r_0636
49	r_0975	0	0	0	0	0	0		r_0637
50	r_0976	0.000527	0.0005289	0.000429	0.000567	0.000572	0.000304		r_0638
51	r_0977	0	0	0	0	0	0		r_0639
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2	r_0978	0.000211	0.0002112	0.000163	0.000227	0.000227	5.65E-05		r_0640
3	r_0979	0	0	0	0	0	0		r_0641
4	r_0982	0.070811	0.0708583	0.070778	0.035404	0.035572	0.035287		r_0642
5	r_0983	0	0	0	0	0	0		r_0643
6	r_0984	-0.04104	-0.040946	-0.04111	-0.0119	-0.01157	-0.01214		r_0644
7	r_0985	0	0	0	0	0	0		r_0645
8	r_0986	1.85E-05	3.08E-05	1.85E-05	1.99E-05	6.37E-05	1.99E-05		r_0646
9	r_0987	0	0	0	0	0	0		r_0647
10	r_0988	0.02518	0.0251814	0.02518	0.027119	0.027125	0.027119		r_0648
11	r_0989	0.02518	0.0251814	0.02518	0.027119	0.027125	0.027119		r_0649
12	r_0990	0	0.608249	-4.80E-05	0.618883	0.619059	-0.00017		r_0650
13	r_0992	0	4.80E-05	0	0	0.000171	0		r_0651
14	r_0993	3.79E-05	3.84E-05	3.72E-05	4.08E-05	4.25E-05	3.95E-05		r_0652
15	r_0995	0.016312	0.0163115	0.016311	0.017568	0.017568	0.017568		r_0653
16	r_0996	0.038377	0.0383784	0.038377	0.025044	0.025049	0.025044		r_0654
17	r_0997	0.038377	0.0383784	0.038377	0.025044	0.025049	0.025044		r_0655
18	r_0998	0	0	0	0	0	0		r_0656
19	r_0999	0	0	0	0	0	0		r_0657
20	r_1000	2.975965	3.810178	0	3.863477	3.863538	0		r_0658
21	r_1001	0	1.02E-06	0	0.00E+00	3.62E-06	0		r_0658
22	r_1002	0	9.33E-07	0	0.00E+00	3.32E-06	0		r_0659
23	r_1003	0	0	0	0	0	0		r_0661
24	r_1004	0	4.80E-05	0	0	0.000171	0		r_0662
25	r_1005	0	4.80E-05	0	0	0.000171	0		r_0663
26	r_1006	0	4.80E-05	0	0	0.000171	0		r_0664
27	r_1007	0	4.80E-05	0	0	0.000171	0		r_0665
28	r_1008	0	0	0	0	0	0		r_0666
29	r_1009	0	0	0	0	0	0		r_0667
30	r_1010	0	0	0	0	0	0		r_0668
31	r_1011	0.000603	0.000606	0.000603	0.000649	0.000653	0.000649		r_0668
32	r_1012	0.000603	0.000606	0.000603	0.000649	0.000653	0.000649		r_0669
33	r_1021	3.819891	3.8199078	0.009726	3.873958	3.874017	0.010466		r_0670
34	r_1022	0	9.605E-05	0	0	0.000342	0		r_0671
35	r_1023	0	4.57E-05	0	0	0.000163	0		r_0672
36	r_1024	0	0	0	0	0	0		r_0673
37	r_1025	0	6.40E-05	0	0	0.000228	0		r_0674
38	r_1026	0.005041	0.0050534	0.004977	0.00543	0.005473	0.005202		r_0675
39	r_1027	0.005041	0.0050414	0.005041	0.00543	0.005438	0.00543		r_0676
40	r_1029	0	0	0	0	0	0		r_0678
41	r_1030	0	4.80E-05	0	0	0.000171	0		r_0678
42	r_1031	0	0	0	0	0	0		r_0679
43	r_1032	0	0	0	0	0	0		r_0680
44	r_1033	0	0	0	0	0	0		r_0680
45	r_1034	0	0	0	0	0	0		r_0680
46	r_1035	0	0	0	0	0	0		r_0680
47	r_1036	0	1.75E-05	0	0.00E+00	6.21E-05	0		r_0681
48	r_1037	0	0	0	0	0	0		r_0682
49	r_1038	0.006097	0.0061092	0.006097	0.006567	0.00661	0.006567		r_0683
50	r_1039	0	0	0	0	0	0		r_0687
51	r_1040	0	2.18E-05	0	0.00E+00	7.77E-05	0		r_0688
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2	r_1041	0.033213	0.0332605	0.033148	0.035771	0.035941	0.035543		r_0688
3	r_1042	0.016839	0.0168394	0.016839	0.018136	0.018136	0.018136		r_0689
4	r_1043	0	0	0	0	0	0		r_0690
5	r_1045	0.000317	0.0003177	0.000317	0.000341	0.000345	0.000341		r_0691
6	r_1046	0	0	0	0	0	0		r_0692
7	r_1047	0	0	0	0	0	0		r_0693
8	r_1048	-0.00133	-0.001284	-0.6096	-0.61231	0.006739	-0.61255		r_0694
9	r_1049	-0.00133	-0.001284	-0.00136	0.006571	0.006739	0.006454		r_0695
10	r_1050	-0.03971	-0.039661	-0.03974	-0.01847	-0.01831	-0.01859		r_0697
11	r_1051	0.002059	0.0020762	0.002059	0.002217	0.002279	0.002217		r_0698
12	r_1054	0.607356	0.6073898	0.60731	0.617974	0.618094	0.617809		r_0699
13	r_1055	0.017622	0.0176288	0.017622	0.002691	0.002714	0.002691		r_0700
14	r_1056	0	9.65E-07	0	0.00E+00	3.44E-06	0		r_0701
15	r_1057	0.002499	0.0024986	0.002499	0.002691	0.002691	0.002691		r_0702
16	r_1058	0	0	0	0	0	0		r_0703
17	r_1063	0.008974	1000	-1000	0.009665	1000	-1000		r_0704
18	r_1065	0	0	0	0	0	0		r_0705
19	r_1066	0.008974	0.008974	0.008974	0.009665	0.009665	0.009665		r_0706
20	r_1067	0	0	0	0	0	0		r_0707
21	r_1068	0	0	0	0	0	0		r_0708
22	r_1069	8.80E-08	8.80E-08	8.80E-08	9.48E-08	9.48E-08	9.48E-08		r_0711
23	r_1070	0	0	0	0	0	0		r_0712
24	r_1071	0	0	-1000	0	0	-1000		r_0713
25	r_1072	0.004461	0.0045086	0.004461	0.004804	0.004975	0.004804		r_0714
26	r_1073	0	0	0	0	0	0		r_0715
27	r_1074	0	2.74E-05	0	0.00E+00	9.77E-05	0		r_0716
28	r_1075	0	7.75E-06	0	0.00E+00	2.76E-05	0		r_0716
29	r_1076	0	0	0	0	0	0		r_0717
30	r_1077	0	4.80E-05	0	0	0.000171	0		r_0718
31	r_1078	0	4.80E-05	0	0	0.000171	0		r_0719
32	r_1079	0	2.74E-05	0	0.00E+00	9.77E-05	0		r_0721
33	r_1080	0	2.74E-05	0	0.00E+00	9.77E-05	0		r_0722
34	r_1081	8.80E-08	8.80E-08	8.80E-08	9.48E-08	9.48E-08	9.48E-08		r_0723
35	r_1082	0	0	0	0	0	0		r_0724
36	r_1083	8.80E-08	8.80E-08	8.80E-08	9.48E-08	9.48E-08	9.48E-08		r_0725
37	r_1084	0.247356	0.2474198	-1000	0.266408	0.266634	-1000		r_0726
38	r_1087	-0.03961	1000	-1000	-0.05895	1000	-1000		r_0726
39	r_1088	0.016328	1000	-1000	0.033875	1000	-1000		r_0727
40	r_1089	0.02328	0.0232796	0.02328	0.025073	0.025073	0.025072		r_0728
41	r_1090	0	0	0	0	0	0		r_0729
42	r_1091	0	1.07E-05	0	0.00E+00	3.80E-05	0		r_0730
43	r_1092	0	0	0	0	0	0		r_0731
44	r_1093	0	0	0	0	0	0		r_0732
45	r_1094	0	0	0	0	0	0		r_0733
46	r_1095	0	0	0	0	0	0		r_0734
47	r_1619	0	4.80E-05	0	0	0.000171	0		r_0735
48	r_1838	0.02518	0.0251814	0.02518	0.027119	0.027125	0.027119		r_0736
49	r_2029	0	0	0	0	0	0		r_0737
50	r_2112	0	0	0	0	0	0		r_0738
51	r_2113	0	0	0	0	0	0		r_0739
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2	r_2114	0.015124	0.0151242	0.015124	0	0	0	r_0747
3	r_2115	0	1000	0	0	1000	0	r_0747
4	r_2116	0	0.0001067	0	0	0.00038	0	r_0747
5	r_2117	0.025242	1000	-1000	0.043474	1000	-1000	r_0748
6	r_2118	0	9.65E-07	0	0.00E+00	3.44E-06	0	r_0748
7	r_2119	0	1000	-1000	0	1000	-1000	r_0748
8	r_2126	0	4.80E-05	0	0	0.000171	0	r_0749
9	r_2131	0.094939	0.0949683	0.094747	0.102252	0.102355	0.101568	r_0749
10	r_2140	0.001863	0.001976	0.001774	0.002007	0.002132	0.001689	r_0749
11	r_2141	0.000109	0.0001904	0	0.000118	0.000406	0	r_0750
12	r_2142	0	0	0	0	0	0	r_0750
13	r_2143	0	0	0	0	0	0	r_0750
14	r_2144	0	0	0	0	0	0	r_0751
15	r_2145	0	0	0	0	0	0	r_0751
16	r_2146	0	0	0	0	0	0	r_0751
17	r_2147	0	0	0	0	0	0	r_0752
18	r_2148	0	0	0	0	0	0	r_0752
19	r_2149	0	0	0	0	0	0	r_0752
20	r_2150	0	0	0	0	0	0	r_0753
21	r_2151	0	0	0	0	0	0	r_0753
22	r_2152	0	0	0	0	0	0	r_0753
23	r_2153	0	0	0	0	0	0	r_0754
24	r_2154	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0754
25	r_2155	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0754
26	r_2156	0	0.0001904	0	0	0.000406	0	r_0755
27	r_2157	3.79E-05	4.46E-05	3.72E-05	4.08E-05	6.46E-05	3.95E-05	r_0755
28	r_2158	3.79E-05	4.20E-05	3.72E-05	4.08E-05	5.55E-05	3.95E-05	r_0755
29	r_2159	3.79E-05	4.09E-05	3.72E-05	4.08E-05	5.14E-05	3.95E-05	r_0756
30	r_2160	0	2.25E-05	0	0.00E+00	4.37E-05	0	r_0756
31	r_2161	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0756
32	r_2162	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0757
33	r_2163	0	0.0001904	0	0	0.000406	0	r_0757
34	r_2164	3.79E-05	4.46E-05	3.72E-05	4.08E-05	6.46E-05	3.95E-05	r_0758
35	r_2165	3.79E-05	4.20E-05	3.72E-05	4.08E-05	5.55E-05	3.95E-05	r_0759
36	r_2166	3.79E-05	4.09E-05	3.72E-05	4.08E-05	5.14E-05	3.95E-05	r_0760
37	r_2167	0	2.25E-05	0	0.00E+00	4.37E-05	0	r_0761
38	r_2168	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0761
39	r_2169	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0762
40	r_2170	0	0.0001904	0	0	0.000406	0	r_0763
41	r_2171	3.79E-05	4.46E-05	3.72E-05	4.08E-05	6.46E-05	3.95E-05	r_0763
42	r_2172	3.79E-05	4.20E-05	3.72E-05	4.08E-05	5.55E-05	3.95E-05	r_0764
43	r_2173	3.79E-05	4.09E-05	3.72E-05	4.08E-05	5.14E-05	3.95E-05	r_0765
44	r_2174	0	2.25E-05	0	0.00E+00	4.37E-05	0	r_0765
45	r_2175	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0766
46	r_2176	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0766
47	r_2177	0	0.0001904	0	0	0.000406	0	r_0766
48	r_2178	3.79E-05	4.46E-05	3.72E-05	4.08E-05	6.46E-05	3.95E-05	r_0767
49	r_2179	3.79E-05	4.20E-05	3.72E-05	4.08E-05	5.55E-05	3.95E-05	r_0767
50	r_2180	3.79E-05	4.09E-05	3.72E-05	4.08E-05	5.14E-05	3.95E-05	r_0767
51	r_2181	0	2.25E-05	0	0.00E+00	4.37E-05	0	r_0767
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2	r_2182	0.000843	0.0009263	0.000758	0.000908	0.001077	0.000605	r_0767
3	r_2183	7.14E-05	1.52E-04	0.00E+00	7.69E-05	3.65E-04	0	r_0768
4	r_2194	0	1000	-1000	0	1000	-1000	r_0769
5	r_2195	0	1000	-1000	0	1000	-1000	r_0770
6	r_2196	0.00E+00	1000	-1000	0	1000	-1000	r_0770
7	r_2197	0	1000	-1000	0	1000	-1000	r_0771
8	r_2198	0	1000	-1000	0	1000	-1000	r_0771
9	r_2199	0	1000	-1000	0	1000	-1000	r_0772
10	r_2200	0	1000	-1000	0	1000	-1000	r_0772
11	r_2201	0	1000	-1000	0	1000	-1000	r_0772
12	r_2202	-2.9E-05	1000	-1000	-3.2E-05	1000	-1000	r_0773
13	r_2203	0	1000	-1000	0	1000	-1000	r_0774
14	r_2204	0	1000	-1000	0	1000	-1000	r_0775
15	r_2205	0	1000	-1000	0	1000	-1000	r_0781
16	r_2206	0	2.74E-05	-1.75E-05	0.00E+00	9.77E-05	-6.21E-05	r_0782
17	r_2207	0	2.74E-05	-1.75E-05	0.00E+00	9.77E-05	-6.21E-05	r_0783
18	r_2208	0	2.74E-05	-1.75E-05	0.00E+00	9.77E-05	-6.21E-05	r_0784
19	r_2209	0	0	0	0	0	0	r_0784
20	r_2210	0	0	0	0	0	0	r_0785
21	r_2211	0.00E+00	1000	-1000	0	1000	-1000	r_0785
22	r_2212	0.00E+00	1000	-1000	0	1000	-1000	r_0786
23	r_2213	0	0	0	0	0	0	r_0787
24	r_2214	-3.8E-05	1000	-1000	-4.1E-05	1000	-1000	r_0788
25	r_2215	0	1000	-1000	0	1000	-1000	r_0789
26	r_2216	0	0	0	0	0	0	r_0790
27	r_2217	0.00E+00	1.00E+03	-1.00E+03	0.00E+00	1.00E+03	-1000	r_0791
28	r_2218	0.00E+00	1000	-1000	0	1000	-1000	r_0792
29	r_2232	0	9.68E-07	0	0.00E+00	3.45E-06	0	r_0793
30	r_2233	0	8.13E-07	0	0.00E+00	2.89E-06	0	r_0795
31	r_2234	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0796
32	r_2235	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0797
33	r_2236	0	1.49E-06	0	0.00E+00	5.31E-06	0	r_0798
34	r_2237	0	1.49E-06	0	0.00E+00	5.31E-06	0	r_0799
35	r_2238	0	1.49E-06	0	0.00E+00	5.31E-06	0	r_0800
36	r_2239	0	6.67E-06	0	0.00E+00	2.37E-05	0	r_0801
37	r_2240	0	4.12E-06	0	0.00E+00	1.47E-05	0	r_0802
38	r_2241	0	2.98E-06	0	0.00E+00	1.06E-05	0	r_0803
39	r_2242	0	1.43E-06	0	0.00E+00	5.07E-06	0	r_0804
40	r_2243	0	1.43E-06	0	0.00E+00	5.07E-06	0	r_0805
41	r_2244	0	1.43E-06	0	0.00E+00	5.07E-06	0	r_0806
42	r_2245	0	3.01E-06	0	0.00E+00	1.07E-05	0	r_0807
43	r_2246	0	3.01E-06	0	0.00E+00	1.07E-05	0	r_0810
44	r_2247	0	3.01E-06	0	0.00E+00	1.07E-05	0	r_0811
45	r_2248	0	1.49E-06	0	0.00E+00	5.31E-06	0	r_0812
46	r_2249	0	1.49E-06	0	0.00E+00	5.31E-06	0	r_0813
47	r_2250	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0815
48	r_2251	0	1.33E-05	0	0.00E+00	4.52E-05	0	r_0816
49	r_2252	0	1.08E-05	0	0.00E+00	3.84E-05	0	r_0817
50	r_2253	0	2.34E-06	0	0.00E+00	8.32E-06	0	r_0818
51	r_2254	0	1.49E-06	0	0.00E+00	5.31E-06	0	r_0819
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2	r_2255	0	1.49E-06	0	0.00E+00	5.31E-06	0 r_0820
3	r_2256	0	1.49E-06	0	0.00E+00	5.31E-06	0 r_0820
4	r_2257	0	6.67E-06	0	0.00E+00	2.37E-05	0 r_0821
5	r_2258	0	4.12E-06	0	0.00E+00	1.47E-05	0 r_0831
6	r_2259	0	2.98E-06	0	0.00E+00	1.06E-05	0 r_0831
7	r_2260	0	1.43E-06	0	0.00E+00	5.07E-06	0 r_0831
8	r_2261	0	1.43E-06	0	0.00E+00	5.07E-06	0 r_0832
9	r_2262	0	1.43E-06	0	0.00E+00	5.07E-06	0 r_0832
10	r_2263	0	3.01E-06	0	0.00E+00	1.07E-05	0 r_0832
11	r_2264	0	3.01E-06	0	0.00E+00	1.07E-05	0 r_0841
12	r_2265	0	1.26E-06	0	0.00E+00	4.48E-06	0 r_0842
13	r_2266	0	1.49E-06	0	0.00E+00	5.31E-06	0 r_0843
14	r_2267	0	1.49E-06	0	0.00E+00	5.31E-06	0 r_0844
15	r_2268	0	1.33E-05	0	0.00E+00	4.52E-05	0 r_0845
16	r_2269	0	1.08E-05	0	0.00E+00	3.84E-05	0 r_0847
17	r_2270	0	2.34E-06	0	0.00E+00	8.32E-06	0 r_0848
18	r_2271	0	1.49E-06	0	0.00E+00	5.31E-06	0 r_0849
19	r_2272	0	1.49E-06	0	0.00E+00	5.31E-06	0 r_0850
20	r_2273	0	1.49E-06	0	0.00E+00	5.31E-06	0 r_0851
21	r_2274	0	6.67E-06	0	0.00E+00	2.37E-05	0 r_0852
22	r_2275	0	4.12E-06	0	0.00E+00	1.47E-05	0 r_0852
23	r_2276	0	2.98E-06	0	0.00E+00	1.06E-05	0 r_0853
24	r_2277	0	1.43E-06	0	0.00E+00	5.07E-06	0 r_0854
25	r_2278	0	1.43E-06	0	0.00E+00	5.07E-06	0 r_0855
26	r_2279	0	1.43E-06	0	0.00E+00	5.07E-06	0 r_0882
27	r_2280	0	3.01E-06	0	0.00E+00	1.07E-05	0 r_0883
28	r_2281	0	3.01E-06	0	0.00E+00	1.07E-05	0 r_0883
29	r_2282	0	1.26E-06	0	0.00E+00	4.48E-06	0 r_0884
30	r_2283	0	1.49E-06	0	0.00E+00	5.31E-06	0 r_0885
31	r_2284	0	1.49E-06	0	0.00E+00	5.31E-06	0 r_0886
32	r_2285	0	1.49E-06	0	0.00E+00	5.31E-06	0 r_0886
33	r_2286	0	6.67E-06	0	0.00E+00	2.37E-05	0 r_0887
34	r_2287	0	4.12E-06	0	0.00E+00	1.47E-05	0 r_0887
35	r_2288	0	2.98E-06	0	0.00E+00	1.06E-05	0 r_0888
36	r_2289	0	1.43E-06	0	0.00E+00	5.07E-06	0 r_0888
37	r_2290	0	1.43E-06	0	0.00E+00	5.07E-06	0 r_0889
38	r_2291	0	1.43E-06	0	0.00E+00	5.07E-06	0 r_0889
39	r_2292	0	3.01E-06	0	0.00E+00	1.07E-05	0 r_0890
40	r_2293	0	3.01E-06	0	0.00E+00	1.07E-05	0 r_0891
41	r_2294	0	1.26E-06	0	0.00E+00	4.48E-06	0 r_0891
42	r_2295	0	1.43E-06	0	0.00E+00	5.07E-06	0 r_0892
43	r_2296	0	1.35E-06	0	0.00E+00	4.79E-06	0 r_0893
44	r_2297	0	1.35E-06	0	0.00E+00	4.79E-06	0 r_0902
45	r_2298	0	1.26E-06	0	0.00E+00	4.48E-06	0 r_0903
46	r_2299	0	3.01E-06	0	0.00E+00	1.07E-05	0 r_0903
47	r_2300	0	3.01E-06	0	0.00E+00	1.07E-05	0 r_0903
48	r_2301	0	1.35E-06	0	0.00E+00	4.79E-06	0 r_0904
49	r_2302	0	3.01E-06	0	0.00E+00	1.07E-05	0 r_0905
50	r_2303	0	1.35E-06	0	0.00E+00	4.79E-06	0 r_0906
51	r_2304	0	3.01E-06	0	0.00E+00	1.07E-05	0 r_0906
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2	r_2305	-0.0053	1000	-1000	-0.00571	1000	-1000	r_0906
3	r_2308	0.000843	0.0008551	0.000737	0.000908	0.00095	0.000528	r_0907
4	r_2309	0	3.20E-05	0	0	0.000114	0	r_0907
5	r_2310	0	8.106E-05	0	0	0.000288	0	r_0907
6	r_2311	0	2.30E-05	0	0.00E+00	8.17E-05	0	r_0908
7	r_2312	0	0.0001067	0	0	0.00038	0	r_0909
8	r_2313	0	2.46E-05	0	0.00E+00	8.76E-05	0	r_0910
9	r_2314	0	4.61E-05	0	0	0.000164	0	r_0911
10	r_2315	0	1.89E-05	0	0.00E+00	6.72E-05	0	r_0912
11	r_2316	0	8.106E-05	0	0	0.000288	0	r_0912
12	r_2317	0	2.30E-05	0	0.00E+00	8.17E-05	0	r_0913
13	r_2318	0	4.05E-05	0	0	0.000144	0	r_0914
14	r_2319	0	1.79E-05	0	0.00E+00	6.36E-05	0	r_0915
15	r_2320	0	4.61E-05	0	0	0.000164	0	r_0916
16	r_2321	0	1.89E-05	0	0.00E+00	6.72E-05	0	r_0916
17	r_2322	0	2.94E-05	0	0	0.000105	0	r_0916
18	r_2323	0	1.53E-05	0	0.00E+00	5.45E-05	0	r_0916
19	r_2324	0	0.0001067	0	0	0.00038	0	r_0916
20	r_2325	0	2.46E-05	0	0.00E+00	8.76E-05	0	r_0917
21	r_2326	0	4.61E-05	0	0	0.000164	0	r_0918
22	r_2327	0	1.89E-05	0	0.00E+00	6.72E-05	0	r_0919
23	r_2328	0	4.61E-05	0	0	0.000164	0	r_0920
24	r_2329	0	1.89E-05	0	0.00E+00	6.72E-05	0	r_0921
25	r_2330	0	2.94E-05	0	0	0.000105	0	r_0922
26	r_2331	0	1.53E-05	0	0.00E+00	5.45E-05	0	r_0929
27	r_2332	0.000843	0.0008551	0.000758	0.000908	0.00095	0.000605	r_0935
28	r_2333	0	8.106E-05	0	0	0.000288	0	r_0936
29	r_2334	0	3.20E-05	0	0	0.000114	0	r_0937
30	r_2335	0	2.30E-05	0	0.00E+00	8.17E-05	0	r_0938
31	r_2336	0	8.106E-05	0	0	0.000288	0	r_0939
32	r_2337	0	4.05E-05	0	0	0.000144	0	r_0940
33	r_2338	0	2.30E-05	0	0.00E+00	8.17E-05	0	r_0941
34	r_2339	0	1.79E-05	0	0.00E+00	6.36E-05	0	r_0942
35	r_2340	0	8.106E-05	0	0	0.000288	0	r_0943
36	r_2341	0	2.30E-05	0	0.00E+00	8.17E-05	0	r_0943
37	r_2342	0	4.05E-05	0	0	0.000144	0	r_0943
38	r_2343	0	1.79E-05	0	0.00E+00	6.36E-05	0	r_0949
39	r_2344	0	0.0001071	0	0.00E+00	2.35E-04	0	r_0950
40	r_2345	0	8.093E-05	0	0	0.000206	0	r_0951
41	r_2346	0	7.38E-05	0	0	0.000199	0	r_0953
42	r_2347	0	7.38E-05	0	0	0.000199	0	r_0954
43	r_2348	0	8.093E-05	0	0	0.000206	0	r_0955
44	r_2349	0	7.38E-05	0	0	0.000199	0	r_0956
45	r_2350	0	7.38E-05	0	0	0.000199	0	r_0957
46	r_2351	0	7.38E-05	0	0	0.000199	0	r_0958
47	r_2352	0	0	0	0	0	0	r_0958
48	r_2353	0	0	0	0	0	0	r_0959
49	r_2354	0	0	0	0	0	0	r_0959
50	r_2355	0	0	0	0	0	0	r_0959
51	r_2356	0	0	0	0	0	0	r_0960
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2	r_2357	0	0	0	0	0	0	r_0960
3	r_2358	0	0	0	0	0	0	r_0960
4	r_2359	0	0	0	0	0	0	r_0961
5	r_2360	0.00E+00	1.07E-04	0.00E+00	0.00E+00	2.35E-04	0	r_0961
6	r_2361	0	8.093E-05	0	0	0.000206	0	r_0961
7	r_2362	0	7.38E-05	0	0	0.000199	0	r_0961
8	r_2363	0	7.38E-05	0	0	0.000199	0	r_0961
9	r_2364	0	8.093E-05	0	0	0.000206	0	r_0962
10	r_2365	0	7.38E-05	0	0	0.000199	0	r_0962
11	r_2366	0	7.38E-05	0	0	0.000199	0	r_0963
12	r_2367	0	7.38E-05	0	0	0.000199	0	r_0963
13	r_2368	0.000109	0.0001366	0	0	0.000215	0	r_0963
14	r_2369	0	6.17E-05	0	0	0.00016	0	r_0963
15	r_2370	0	3.20E-05	0	0	0.000114	0	r_0963
16	r_2371	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0963
17	r_2372	0	6.17E-05	0	0	0.00016	0	r_0963
18	r_2373	0	3.08E-05	0	0	0.00011	0	r_0964
19	r_2374	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0965
20	r_2375	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0966
21	r_2376	0	3.20E-05	0	0	0.000114	0	r_0967
22	r_2377	0	3.20E-05	0	0	0.000114	0	r_0968
23	r_2378	0	3.20E-05	0	0	0.000114	0	r_0969
24	r_2379	0	3.20E-05	0	0	0.000114	0	r_0970
25	r_2380	0	3.20E-05	0	0	0.000114	0	r_0971
26	r_2381	0	3.20E-05	0	0	0.000114	0	r_0972
27	r_2382	0	3.20E-05	0	0	0.000114	0	r_0973
28	r_2383	0	3.20E-05	0	0	0.000114	0	r_0974
29	r_2384	0	6.17E-05	0	0	0.00016	0	r_0974
30	r_2385	0	3.08E-05	0	0	0.00011	0	r_0974
31	r_2386	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0974
32	r_2387	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0975
33	r_2388	0	3.08E-05	0	0	0.00011	0	r_0975
34	r_2389	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0975
35	r_2390	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0975
36	r_2391	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0976
37	r_2392	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0976
38	r_2393	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0976
39	r_2394	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0976
40	r_2395	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0977
41	r_2396	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0977
42	r_2397	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0977
43	r_2398	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0977
44	r_2399	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0978
45	r_2400	0	0.0001366	0	0.000118	0.000215	0	r_0978
46	r_2401	0	6.17E-05	0	0	0.00016	0	r_0978
47	r_2402	0	3.20E-05	0	0	0.000114	0	r_0978
48	r_2403	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0979
49	r_2404	0	6.17E-05	0	0	0.00016	0	r_0979
50	r_2405	0	3.08E-05	0	0	0.00011	0	r_0979
51	r_2406	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0979
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2	r_2407	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0982
3	r_2408	0	3.20E-05	0	0	0.000114	0	r_0983
4	r_2409	0	3.20E-05	0	0	0.000114	0	r_0984
5	r_2410	0	3.20E-05	0	0	0.000114	0	r_0985
6	r_2411	0	3.20E-05	0	0	0.000114	0	r_0985
7	r_2412	0	3.20E-05	0	0	0.000114	0	r_0985
8	r_2413	0	3.20E-05	0	0	0.000114	0	r_0985
9	r_2414	0	3.20E-05	0	0	0.000114	0	r_0985
10	r_2415	0	3.20E-05	0	0	0.000114	0	r_0985
11	r_2416	0	6.17E-05	0	0	0.00016	0	r_0985
12	r_2417	0	3.08E-05	0	0	0.00011	0	r_0986
13	r_2418	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0987
14	r_2419	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0988
15	r_2420	0	3.08E-05	0	0	0.00011	0	r_0989
16	r_2421	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0990
17	r_2422	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0993
18	r_2423	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0993
19	r_2424	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0993
20	r_2425	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0995
21	r_2426	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0995
22	r_2427	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0996
23	r_2428	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0997
24	r_2429	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0998
25	r_2430	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_0999
26	r_2431	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_1000
27	r_2432	0.000843	0.0008712	0.000704	0.000908	0.001006	0.000541	r_1001
28	r_2433	0	7.38E-05	0	0	0.00016	0	r_1002
29	r_2434	0	0.0001028	0	0	0.000318	0	r_1003
30	r_2435	0	7.38E-05	0	0	0.000149	0	r_1004
31	r_2436	0	0.0001028	0	0	0.000318	0	r_1004
32	r_2437	0	7.38E-05	0	0	0.000149	0	r_1005
33	r_2438	0	7.38E-05	0	0	0.000187	0	r_1005
34	r_2439	0	7.38E-05	0	0	0.000149	0	r_1006
35	r_2440	0	5.36E-05	0	0	0.000117	0	r_1006
36	r_2441	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1007
37	r_2442	0	4.05E-05	0	0	0.000103	0	r_1007
38	r_2443	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1010
39	r_2444	0	4.05E-05	0	0	0.000103	0	r_1011
40	r_2445	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1012
41	r_2446	0.000527	0.0005278	0.000442	0.000567	0.000571	0.000265	r_1021
42	r_2447	0	4.35E-05	0	0	0.000126	0	r_1021
43	r_2448	0	8.106E-05	0	0	0.000288	0	r_1021
44	r_2449	0	4.22E-05	0	0	0.000114	0	r_1021
45	r_2450	0	8.106E-05	0	0	0.000288	0	r_1021
46	r_2451	0	4.22E-05	0	0	0.000114	0	r_1022
47	r_2452	0	4.61E-05	0	0	0.000152	0	r_1022
48	r_2453	0	4.22E-05	0	0	0.000114	0	r_1023
49	r_2454	0.000316	0.0003443	0.000202	0.000341	0.000439	0.000137	r_1024
50	r_2455	0	7.38E-05	0	0	0.00016	0	r_1025
51	r_2456	0	8.13E-05	0	0	0.000169	0	r_1026
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2	r_2457	0	7.38E-05	0	0	0.000149	0	r_1027
3	r_2458	0	8.13E-05	0	0	0.000169	0	r_1027
4	r_2459	0	7.38E-05	0	0	0.000149	0	r_1028
5	r_2460	0	7.38E-05	0	0	0.000149	0	r_1029
6	r_2461	0	7.38E-05	0	0	0.000149	0	r_1030
7	r_2462	0	0	0	0	0	0	r_1030
8	r_2463	0	0	0	0	0	0	r_1030
9	r_2464	0.000475	0.0004754	0.000282	0.000511	0.000514	0	r_1030
10	r_2465	0	4.35E-05	0	0	0.000126	0	r_1031
11	r_2466	0	8.106E-05	0	0	0.000288	0	r_1031
12	r_2467	0	4.22E-05	0	0	0.000114	0	r_1032
13	r_2468	0	8.106E-05	0	0	0.000288	0	r_1033
14	r_2469	0	4.22E-05	0	0	0.000114	0	r_1034
15	r_2470	0	4.61E-05	0	0	0.000152	0	r_1035
16	r_2471	0	4.22E-05	0	0	0.000114	0	r_1036
17	r_2472	0	0.0001921	0	0	0.000512	0	r_1037
18	r_2473	0	3.73E-05	0	0	0.000108	0	r_1037
19	r_2474	0	5.70E-05	0	0	0.000203	0	r_1038
20	r_2475	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1038
21	r_2476	0	5.70E-05	0	0	0.000203	0	r_1039
22	r_2477	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1039
23	r_2478	0	3.79E-05	0	0	0.000125	0	r_1039
24	r_2479	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1040
25	r_2480	0	0.0001921	0	0	0.000512	0	r_1041
26	r_2481	0	3.73E-05	0	0	0.000108	0	r_1042
27	r_2482	0	5.70E-05	0	0	0.000203	0	r_1043
28	r_2483	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1045
29	r_2484	0	5.70E-05	0	0	0.000203	0	r_1046
30	r_2485	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1047
31	r_2486	0	3.79E-05	0	0	0.000125	0	r_1048
32	r_2487	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1049
33	r_2488	0	0.0003809	0	0.000409	0.000412	0	r_1049
34	r_2489	0	4.35E-05	0	0	0.000126	0	r_1050
35	r_2490	0	8.106E-05	0	0	0.000288	0	r_1050
36	r_2491	0	4.22E-05	0	0	0.000114	0	r_1051
37	r_2492	0.00038	0.0003809	0	0	0.000412	0	r_1051
38	r_2493	0	4.35E-05	0	0	0.000126	0	r_1051
39	r_2494	0	8.106E-05	0	0	0.000288	0	r_1051
40	r_2495	0	4.22E-05	0	0	0.000114	0	r_1054
41	r_2496	0	0.0003809	0	0.000409	0.000412	0	r_1055
42	r_2497	0	4.35E-05	0	0	0.000126	0	r_1056
43	r_2498	0	8.106E-05	0	0	0.000288	0	r_1057
44	r_2499	0	4.22E-05	0	0	0.000114	0	r_1058
45	r_2500	0.00038	0.0003809	0	0	0.000412	0	r_1063
46	r_2501	0	4.35E-05	0	0	0.000126	0	r_1065
47	r_2502	0	8.106E-05	0	0	0.000288	0	r_1066
48	r_2503	0	4.22E-05	0	0	0.000114	0	r_1067
49	r_2504	0	0.0003809	0	0.000409	0.000412	0	r_1068
50	r_2505	0	4.35E-05	0	0	0.000126	0	r_1069
51	r_2506	0	8.106E-05	0	0	0.000288	0	r_1070

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2	r_2507	0	4.22E-05	0	0	0.000114	0	r_1071
3	r_2508	0.00038	0.0003809	0	0	0.000412	0	r_1072
4	r_2509	0	4.35E-05	0	0	0.000126	0	r_1073
5	r_2510	0	8.106E-05	0	0	0.000288	0	r_1074
6	r_2511	0	4.22E-05	0	0	0.000114	0	r_1075
7	r_2512	0	7.38E-05	0	0	0.000199	0	r_1076
8	r_2513	0	7.38E-05	0	0	0.000199	0	r_1077
9	r_2514	0	7.38E-05	0	0	0.000199	0	r_1078
10	r_2515	0	7.38E-05	0	0	0.000199	0	r_1079
11	r_2516	0	7.38E-05	0	0	0.000199	0	r_1080
12	r_2517	0	7.38E-05	0	0	0.000199	0	r_1081
13	r_2518	0	7.38E-05	0	0	0.000199	0	r_1082
14	r_2519	0	7.38E-05	0	0	0.000199	0	r_1083
15	r_2520	0	0	0	0	0	0	r_1084
16	r_2521	0	0	0	0	0	0	r_1085
17	r_2522	0	0	0	0	0	0	r_1085
18	r_2523	0	0	0	0	0	0	r_1085
19	r_2524	0	0	0	0	0	0	r_1085
20	r_2525	0	0	0	0	0	0	r_1085
21	r_2526	0	0	0	0	0	0	r_1085
22	r_2527	0	0	0	0	0	0	r_1085
23	r_2528	0	4.22E-05	0	0	0.000114	0	r_1085
24	r_2529	0	4.22E-05	0	0	0.000114	0	r_1085
25	r_2530	0	4.22E-05	0	0	0.000114	0	r_1085
26	r_2531	0	4.22E-05	0	0	0.000114	0	r_1085
27	r_2532	0	4.22E-05	0	0	0.000114	0	r_1085
28	r_2533	0	4.22E-05	0	0	0.000114	0	r_1085
29	r_2534	0	4.22E-05	0	0	0.000114	0	r_1086
30	r_2535	0	4.22E-05	0	0	0.000114	0	r_1086
31	r_2536	0	5.36E-05	0	0	0.000117	0	r_1086
32	r_2537	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1086
33	r_2538	0	4.05E-05	0	0	0.000103	0	r_1086
34	r_2539	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1086
35	r_2540	0	4.05E-05	0	0	0.000103	0	r_1086
36	r_2541	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1086
37	r_2542	0	5.36E-05	0	0	0.000117	0	r_1086
38	r_2543	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1086
39	r_2544	0	4.05E-05	0	0	0.000103	0	r_1086
40	r_2545	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1086
41	r_2546	0	4.05E-05	0	0	0.000103	0	r_1086
42	r_2547	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_1087
43	r_2548	0	0	0	0	0	0	r_1088
44	r_2549	0	0	0	0	0	0	r_1089
45	r_2550	0	0	0	0	0	0	r_1090
46	r_2551	0	0	0	0	0	0	r_1091
47	r_2552	0	0	0	0	0	0	r_1092
48	r_2553	0	0	0	0	0	0	r_1093
49	r_2554	0	0	0	0	0	0	r_1094
50	r_2555	0	0	0	0	0	0	r_1095
51	r_2556	0	0	0	0	0	0	r_1095
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2	r_2557	0	0	0	0	0	0	r_1095
3	r_2558	0	0	0	0	0	0	r_1095
4	r_2559	0	0	0	0	0	0	r_1099
5	r_2560	0	0	0	0	0	0	r_1099
6	r_2561	0	0	0	0	0	0	r_1101
7	r_2562	0	0	0	0	0	0	r_1101
8	r_2563	0	0	0	0	0	0	r_1104
9	r_2564	0	0	0	0	0	0	r_1106
10	r_2565	0	0	0	0	0	0	r_1108
11	r_2566	0	0	0	0	0	0	r_1108
12	r_2567	0	0	0	0	0	0	r_1108
13	r_2568	0	0	0	0	0	0	r_1108
14	r_2569	0	0	0	0	0	0	r_1109
15	r_2570	0	0	0	0	0	0	r_1110
16	r_2571	0	0	0	0	0	0	r_1110
17	r_2572	0	0	0	0	0	0	r_1110
18	r_2573	0	0	0	0	0	0	r_1111
19	r_2574	0	0	0	0	0	0	r_1112
20	r_2575	0	0	0	0	0	0	r_1113
21	r_2576	0	0	0	0	0	0	r_1114
22	r_2577	0	0	0	0	0	0	r_1115
23	r_2578	0	0	0	0	0	0	r_1115
24	r_2579	0	0	0	0	0	0	r_1115
25	r_2580	0	0	0	0	0	0	r_1115
26	r_2581	0	0	0	0	0	0	r_1116
27	r_2582	0	0	0	0	0	0	r_1118
28	r_2583	0	0	0	0	0	0	r_1119
29	r_2584	0	0	0	0	0	0	r_1120
30	r_2585	0	0	0	0	0	0	r_1125
31	r_2586	0	0	0	0	0	0	r_1126
32	r_2587	0	0	0	0	0	0	r_1127
33	r_2588	0	0	0	0	0	0	r_1128
34	r_2589	0	0	0	0	0	0	r_1129
35	r_2590	0	0	0	0	0	0	r_1130
36	r_2591	0	0	0	0	0	0	r_1131
37	r_2592	0	0	0	0	0	0	r_1132
38	r_2593	0	0	0	0	0	0	r_1133
39	r_2594	0	0	0	0	0	0	r_1133
40	r_2595	0	0	0	0	0	0	r_1133
41	r_2596	0	0	0	0	0	0	r_1133
42	r_2597	0	0	0	0	0	0	r_1134
43	r_2598	0	0	0	0	0	0	r_1134
44	r_2599	0	0	0	0	0	0	r_1134
45	r_2600	0	0	0	0	0	0	r_1134
46	r_2601	0	0	0	0	0	0	r_1134
47	r_2602	0	0	0	0	0	0	r_1134
48	r_2603	0	0	0	0	0	0	r_1134
49	r_2604	0	0	0	0	0	0	r_1134
50	r_2605	0	0	0	0	0	0	r_1134
51	r_2606	0	0	0	0	0	0	r_1134
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2	r_2607	0	0	0	0	0	0	r_1134
3	r_2608	0	0	0	0	0	0	r_1134
4	r_2609	0	0	0	0	0	0	r_1134
5	r_2610	0	0	0	0	0	0	r_1134
6	r_2611	0	0	0	0	0	0	r_1134
7	r_2612	0	0	0	0	0	0	r_1135
8	r_2613	0	0	0	0	0	0	r_1135
9	r_2614	0	0	0	0	0	0	r_1135
10	r_2615	0	0	0	0	0	0	r_1135
11	r_2616	0	0	0	0	0	0	r_1135
12	r_2617	0	0	0	0	0	0	r_1135
13	r_2618	0	0	0	0	0	0	r_1136
14	r_2619	0	0	0	0	0	0	r_1139
15	r_2620	0	1000	-1000	0	1000	-1000	r_1139
16	r_2621	0	1000	-1000	0	1000	-1000	r_1139
17	r_2622	0	1000	-1000	0	1000	-1000	r_1139
18	r_2623	0	1000	-1000	0	1000	-1000	r_1139
19	r_2624	0	1000	-1000	0	1000	-1000	r_1139
20	r_2625	0	1000	-1000	0	1000	-1000	r_1139
21	r_2626	0	1000	-1000	0	1000	-1000	r_1139
22	r_2627	0	1000	-1000	0	1000	-1000	r_1139
23	r_2628	0	1000	-1000	0	1000	-1000	r_1139
24	r_2629	0	1000	-1000	0	1000	-1000	r_1139
25	r_2630	0	1000	-1000	0	1000	-1000	r_1139
26	r_2631	0	1000	-1000	0	1000	-1000	r_1139
27	r_2632	0	1000	-1000	0	1000	-1000	r_1139
28	r_2633	0	1000	-1000	0	1000	-1000	r_1139
29	r_2634	0	1000	-1000	0	1000	-1000	r_1146
30	r_2635	0	1000	-1000	0	1000	-1000	r_1146
31	r_2636	0	1000	-1000	0	1000	-1000	r_1147
32	r_2637	0	1000	-1000	0	1000	-1000	r_1147
33	r_2638	0	1000	-1000	0	1000	-1000	r_1148
34	r_2639	0	1000	-1000	0	1000	-1000	r_1148
35	r_2640	0	1000	-1000	0	1000	-1000	r_1151
36	r_2641	0	1000	-1000	0	1000	-1000	r_1161
37	r_2642	0	1000	-1000	0	1000	-1000	r_1161
38	r_2643	0	1000	-1000	0	1000	-1000	r_1162
39	r_2644	0	1000	-1000	0	1000	-1000	r_1162
40	r_2645	0	1000	-1000	0	1000	-1000	r_1165
41	r_2646	0	1000	-1000	0	1000	-1000	r_1166
42	r_2647	0	1000	-1000	0	1000	-1000	r_1166
43	r_2648	0	1000	-1000	0	1000	-1000	r_1166
44	r_2649	0	1000	-1000	0	1000	-1000	r_1166
45	r_2650	0	1000	-1000	0	1000	-1000	r_1166
46	r_2651	0	1000	-1000	0	1000	-1000	r_1166
47	r_2652	0	1000	-1000	0	1000	-1000	r_1166
48	r_2653	0	1000	-1000	0	1000	-1000	r_1166
49	r_2654	0	1000	-1000	0	1000	-1000	r_1166
50	r_2655	0	1000	-1000	0	1000	-1000	r_1166
51	r_2656	0	1000	-1000	0	1000	-1000	r_1166
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2	r_2657	0	1000	-1000	0	1000	-1000	r_1166
3	r_2658	0	1000	-1000	0	1000	-1000	r_1166
4	r_2659	0	1000	-1000	0	1000	-1000	r_1166
5	r_2660	0	1000	-1000	0	1000	-1000	r_1166
6	r_2661	0	1000	-1000	0	1000	-1000	r_1166
7	r_2662	0	1000	-1000	0	1000	-1000	r_1166
8	r_2663	0	1000	-1000	0	1000	-1000	r_1166
9	r_2664	0	1000	-1000	0	1000	-1000	r_1166
10	r_2665	0	1000	-1000	0	1000	-1000	r_1167
11	r_2666	0	1000	-1000	0	1000	-1000	r_1168
12	r_2667	0	1000	-1000	0	1000	-1000	r_1168
13	r_2668	0	1000	-1000	0	1000	-1000	r_1169
14	r_2669	0	1000	-1000	0	1000	-1000	r_1170
15	r_2670	0	1000	-1000	0	1000	-1000	r_1171
16	r_2671	0	1000	-1000	0	1000	-1000	r_1171
17	r_2672	0	1000	-1000	0	1000	-1000	r_1171
18	r_2673	0	1000	-1000	0	1000	-1000	r_1172
19	r_2674	0	1000	-1000	0	1000	-1000	r_1173
20	r_2675	0	1000	-1000	0	1000	-1000	r_1173
21	r_2676	0	1000	-1000	0	1000	-1000	r_1173
22	r_2677	0	1000	-1000	0	1000	-1000	r_1173
23	r_2678	0	1000	-1000	0	1000	-1000	r_1173
24	r_2679	0	1000	-1000	0	1000	-1000	r_1175
25	r_2680	0	1000	-1000	0	1000	-1000	r_1176
26	r_2681	0	1000	-1000	0	1000	-1000	r_1176
27	r_2682	0	1000	-1000	0	1000	-1000	r_1176
28	r_2683	0	1000	-1000	0	1000	-1000	r_1176
29	r_2684	0	1000	-1000	0	1000	-1000	r_1177
30	r_2685	0	1000	-1000	0	1000	-1000	r_1177
31	r_2686	0	1000	-1000	0	1000	-1000	r_1183
32	r_2687	0	1000	-1000	0	1000	-1000	r_1183
33	r_2688	0	1000	-1000	0	1000	-1000	r_1183
34	r_2689	0	1000	-1000	0	1000	-1000	r_1183
35	r_2690	0	1000	-1000	0	1000	-1000	r_1183
36	r_2691	0	1000	-1000	0	1000	-1000	r_1183
37	r_2692	0	1000	-1000	0	1000	-1000	r_1183
38	r_2693	0	1000	-1000	0	1000	-1000	r_1184
39	r_2694	0	1000	-1000	0	1000	-1000	r_1184
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41	r_2696	0	1000	-1000	0	1000	-1000	r_1185
42	r_2697	0	1000	-1000	0	1000	-1000	r_1186
43	r_2698	0	1000	-1000	0	1000	-1000	r_1186
44	r_2699	0	1000	-1000	0	1000	-1000	r_1186
45	r_2700	0	1000	-1000	0	1000	-1000	r_1186
46	r_2701	0	1000	-1000	0	1000	-1000	r_1187
47	r_2702	0	1000	-1000	0	1000	-1000	r_1188
48	r_2703	0	1000	-1000	0	1000	-1000	r_1188
49	r_2704	0	1000	-1000	0	1000	-1000	r_1189
50	r_2705	0	1000	-1000	0	1000	-1000	r_1190
51	r_2706	0	1000	-1000	0	1000	-1000	r_1190
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3	r_2708	0	1000	-1000	0	1000	-1000	r_1191
4	r_2709	0	1000	-1000	0	1000	-1000	r_1192
5	r_2710	0	1000	-1000	0	1000	-1000	r_1192
6	r_2711	0	1000	-1000	0	1000	-1000	r_1192
7	r_2712	0	1000	-1000	0	1000	-1000	r_1192
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9	r_2714	0	1000	-1000	0	1000	-1000	r_1192
10	r_2715	0	1000	-1000	0	1000	-1000	r_1192
11	r_2716	0	1000	-1000	0	1000	-1000	r_1193
12	r_2717	0	1000	-1000	0	1000	-1000	r_1194
13	r_2718	0	1000	-1000	0	1000	-1000	r_1195
14	r_2719	0	1000	-1000	0	1000	-1000	r_1196
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17	r_2722	0	1000	-1000	0	1000	-1000	r_1196
18	r_2723	0	1000	-1000	0	1000	-1000	r_1197
19	r_2724	0	1000	-1000	0	1000	-1000	r_1198
20	r_2725	0	1000	-1000	0	1000	-1000	r_1198
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22	r_2727	0	1000	-1000	0	1000	-1000	r_1199
23	r_2728	0	1000	-1000	0	1000	-1000	r_1199
24	r_2729	0	1000	-1000	0	1000	-1000	r_1199
25	r_2730	0	1000	-1000	0	1000	-1000	r_1200
26	r_2731	0	1000	-1000	0	1000	-1000	r_1200
27	r_2732	0	1000	-1000	0	1000	-1000	r_1200
28	r_2733	0	1000	-1000	0	1000	-1000	r_1201
29	r_2734	0	1000	-1000	0	1000	-1000	r_1201
30	r_2735	0	1000	-1000	0	1000	-1000	r_1201
31	r_2736	0	1000	-1000	0	1000	-1000	r_1202
32	r_2737	0	1000	-1000	0	1000	-1000	r_1203
33	r_2738	0	1000	-1000	0	1000	-1000	r_1204
34	r_2739	0	1000	-1000	0	1000	-1000	r_1204
35	r_2740	0	1000	-1000	0	1000	-1000	r_1205
36	r_2741	0	1000	-1000	0	1000	-1000	r_1205
37	r_2742	0	1000	-1000	0	1000	-1000	r_1205
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39	r_2744	0	1000	-1000	0	1000	-1000	r_1205
40	r_2745	0	1000	-1000	0	1000	-1000	r_1206
41	r_2746	0	1000	-1000	0	1000	-1000	r_1207
42	r_2747	0	1000	-1000	0	1000	-1000	r_1208
43	r_2748	0	1000	-1000	0	1000	-1000	r_1209
44	r_2749	0	1000	-1000	0	1000	-1000	r_1210
45	r_2750	0	1000	-1000	0	1000	-1000	r_1210
46	r_2751	0	1000	-1000	0	1000	-1000	r_1211
47	r_2752	0	1000	-1000	0	1000	-1000	r_1211
48	r_2753	0	1000	-1000	0	1000	-1000	r_1211
49	r_2754	0	1000	-1000	0	1000	-1000	r_1211
50	r_2755	0	1000	-1000	0	1000	-1000	r_1211
51	r_2756	0	1000	-1000	0	1000	-1000	r_1211
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2	r_2757	0	1000	-1000	0	1000	-1000	r_1212
3	r_2758	0	1000	-1000	0	1000	-1000	r_1212
4	r_2759	0	1000	-1000	0	1000	-1000	r_1212
5	r_2760	0	1000	-1000	0	1000	-1000	r_1213
6	r_2761	0	1000	-1000	0	1000	-1000	r_1213
7	r_2762	0	1000	-1000	0	1000	-1000	r_1214
8	r_2763	0	1000	-1000	0	1000	-1000	r_1214
9	r_2764	0	1000	-1000	0	1000	-1000	r_1214
10	r_2765	0	1000	-1000	0	1000	-1000	r_1214
11	r_2766	0	1000	-1000	0	1000	-1000	r_1214
12	r_2767	0	1000	-1000	0	1000	-1000	r_1214
13	r_2768	0	1000	-1000	0	1000	-1000	r_1214
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15	r_2770	0	1000	-1000	0	1000	-1000	r_1215
16	r_2771	0	1000	-1000	0	1000	-1000	r_1215
17	r_2772	0	1000	-1000	0	1000	-1000	r_1215
18	r_2773	0	1000	-1000	0	1000	-1000	r_1215
19	r_2774	0	1000	-1000	0	1000	-1000	r_1216
20	r_2775	0	1000	-1000	0	1000	-1000	r_1216
21	r_2776	0	1000	-1000	0	1000	-1000	r_1217
22	r_2777	0	1000	-1000	0	1000	-1000	r_1217
23	r_2778	0	1000	-1000	0	1000	-1000	r_1217
24	r_2779	0	1000	-1000	0	1000	-1000	r_1217
25	r_2780	0	1000	-1000	0	1000	-1000	r_1217
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28	r_2783	0	1000	-1000	0	1000	-1000	r_1218
29	r_2784	0	1000	-1000	0	1000	-1000	r_1218
30	r_2785	0	1000	-1000	0	1000	-1000	r_1218
31	r_2786	0	1000	-1000	0	1000	-1000	r_1219
32	r_2787	0	1000	-1000	0	1000	-1000	r_1219
33	r_2788	0	1000	-1000	0	1000	-1000	r_1219
34	r_2789	0	1000	-1000	0	1000	-1000	r_1219
35	r_2790	0	1000	-1000	0	1000	-1000	r_1219
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38	r_2793	0	1000	-1000	0	1000	-1000	r_1221
39	r_2794	0	1000	-1000	0	1000	-1000	r_1222
40	r_2795	0	1000	-1000	0	1000	-1000	r_1222
41	r_2796	0	1000	-1000	0	1000	-1000	r_1223
42	r_2797	0	1000	-1000	0	1000	-1000	r_1223
43	r_2798	0	1000	-1000	0	1000	-1000	r_1223
44	r_2799	0	1000	-1000	0	1000	-1000	r_1223
45	r_2800	0	1000	-1000	0	1000	-1000	r_1223
46	r_2801	0	1000	-1000	0	1000	-1000	r_1223
47	r_2802	0	1000	-1000	0	1000	-1000	r_1224
48	r_2803	0	1000	-1000	0	1000	-1000	r_1224
49	r_2804	0	1000	-1000	0	1000	-1000	r_1224
50	r_2805	0	1000	-1000	0	1000	-1000	r_1224
51	r_2806	0	1000	-1000	0	1000	-1000	r_1224
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3	r_2808	0	1000	-1000	0	1000	-1000	r_1225
4	r_2809	0	1000	-1000	0	1000	-1000	r_1226
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6	r_2811	0	1000	-1000	0	1000	-1000	r_1227
7	r_2820	0	4.80E-05	0	0	0.000171	0	r_1227
8	r_2821	0	4.80E-05	0	0	0.000171	0	r_1227
9	r_2822	0	4.80E-05	0	0	0.000171	0	r_1228
10	r_2823	0	4.80E-05	0	0	0.000171	0	r_1229
11	r_2824	0	4.80E-05	0	0	0.000171	0	r_1229
12	r_2825	0	4.80E-05	0	0	0.000171	0	r_1230
13	r_2826	0	4.80E-05	0	0	0.000171	0	r_1231
14	r_2827	0	4.80E-05	0	0	0.000171	0	r_1232
15	r_2828	0	0	0	0	0	0	r_1235
16	r_2829	0	0	0	0	0	0	r_1236
17	r_2830	0	0	0	0	0	0	r_1237
18	r_2831	0	0	0	0	0	0	r_1238
19	r_2832	0	0	0	0	0	0	r_1238
20	r_2833	0	0	0	0	0	0	r_1239
21	r_2834	0	0	0	0	0	0	r_1241
22	r_2835	0	0	0	0	0	0	r_1244
23	r_2836	0	4.80E-05	0	0	0.000171	0	r_1244
24	r_2837	0	4.80E-05	0	0	0.000171	0	r_1244
25	r_2838	0	4.80E-05	0	0	0.000171	0	r_1244
26	r_2839	0	4.80E-05	0	0	0.000171	0	r_1244
27	r_2840	0	4.80E-05	0	0	0.000171	0	r_1245
28	r_2841	0	4.80E-05	0	0	0.000171	0	r_1245
29	r_2842	0	4.80E-05	0	0	0.000171	0	r_1249
30	r_2843	0	4.80E-05	0	0	0.000171	0	r_1250
31	r_2844	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1251
32	r_2845	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1251
33	r_2846	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1252
34	r_2847	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1252
35	r_2848	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1253
36	r_2849	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1254
37	r_2850	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1255
38	r_2851	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1256
39	r_2852	0	4.80E-05	0	0	0.000171	0	r_1257
40	r_2853	0	4.80E-05	0	0	0.000171	0	r_1258
41	r_2854	0	4.80E-05	0	0	0.000171	0	r_1259
42	r_2855	0	4.80E-05	0	0	0.000171	0	r_1260
43	r_2856	0	4.80E-05	0	0	0.000171	0	r_1260
44	r_2857	0	4.80E-05	0	0	0.000171	0	r_1260
45	r_2858	0	4.80E-05	0	0	0.000171	0	r_1260
46	r_2859	0	4.80E-05	0	0	0.000171	0	r_1260
47	r_2860	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1260
48	r_2861	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1261
49	r_2862	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1261
50	r_2863	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1262
51	r_2864	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1262
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2	r_2865	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1262
3	r_2866	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1262
4	r_2867	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_1263
5	r_2868	0	4.80E-05	0	0	0.000171	0	r_1263
6	r_2869	0	4.80E-05	0	0	0.000171	0	r_1263
7	r_2870	0	4.80E-05	0	0	0.000171	0	r_1263
8	r_2871	0	4.80E-05	0	0	0.000171	0	r_1264
9	r_2872	0	4.80E-05	0	0	0.000171	0	r_1265
10	r_2873	0	4.80E-05	0	0	0.000171	0	r_1266
11	r_2874	0	4.80E-05	0	0	0.000171	0	r_1266
12	r_2875	0	4.80E-05	0	0	0.000171	0	r_1267
13	r_2876	0	4.80E-05	0	0	0.000171	0	r_1269
14	r_2877	0	4.80E-05	0	0	0.000171	0	r_1270
15	r_2878	0	4.80E-05	0	0	0.000171	0	r_1270
16	r_2879	0	4.80E-05	0	0	0.000171	0	r_1270
17	r_2880	0	4.80E-05	0	0	0.000171	0	r_1271
18	r_2881	0	4.80E-05	0	0	0.000171	0	r_1272
19	r_2882	0	4.80E-05	0	0	0.000171	0	r_1273
20	r_2883	0	4.80E-05	0	0	0.000171	0	r_1274
21	r_2884	0.00038	1000	-1000	0	1000	-1000	r_1275
22	r_2885	0	1000	-1000	0	1000	-1000	r_1276
23	r_2886	0	1000	-1000	0	1000	-1000	r_1277
24	r_2887	0	1000	-1000	0	1000	-1000	r_1277
25	r_2888	-0.00038	1000	-1000	0	1000	-1000	r_1278
26	r_2889	0	1000	-1000	0	1000	-1000	r_1278
27	r_2890	0	1000	-1000	0	1000	-1000	r_1284
28	r_2891	0	1000	-1000	0	1000	-1000	r_1284
29	r_2892	0	1000	-1000	0	1000	-1000	r_1285
30	r_2893	0	1000	-1000	0	1000	-1000	r_1288
31	r_2894	0	1000	-1000	0	1000	-1000	r_1288
32	r_2895	0	1000	-1000	0	1000	-1000	r_1288
33	r_2896	0	1000	-1000	0	1000	-1000	r_1289
34	r_2897	0	1000	-1000	0	1000	-1000	r_1290
35	r_2898	0	1000	-1000	0	1000	-1000	r_1291
36	r_2899	0	1000	-1000	0	1000	-1000	r_1292
37	r_2900	0	1000	-1000	0	1000	-1000	r_1293
38	r_2901	0	1000	-1000	0	1000	-1000	r_1294
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41	r_2904	0	1000	-1000	0	1000	-1000	r_1296
42	r_2905	0	1000	-1000	0	1000	-1000	r_1297
43	r_2906	0	1000	-1000	0	1000	-1000	r_1302
44	r_2907	0	1000	-1000	0	1000	-1000	r_1305
45	r_2908	0	1000	-1000	0	1000	-1000	r_1306
46	r_2909	0	1000	-1000	0	1000	-1000	r_1309
47	r_2910	0	1000	-1000	0	1000	-1000	r_1315
48	r_2911	0	1000	-1000	0	1000	-1000	r_1315
49	r_2912	0	1000	-1000	0	1000	-1000	r_1321
50	r_2913	0	1000	-1000	0	1000	-1000	r_1321
51	r_2914	0	1000	-1000	0	1000	-1000	r_1323

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2	r_2915	0	1000	-1000	0	1000	-1000	r_1323
3	r_2916	0	1000	-1000	0	1000	-1000	r_1325
4	r_2917	0	1000	-1000	0	1000	-1000	r_1328
5	r_2918	0	1000	-1000	0	1000	-1000	r_1330
6	r_2919	0	1000	-1000	0	1000	-1000	r_1334
7	r_2920	0	1000	-1000	0	1000	-1000	r_1334
8	r_2921	0	1000	-1000	0	1000	-1000	r_1334
9	r_2922	0	1000	-1000	0	1000	-1000	r_1334
10	r_2923	0	1000	-1000	0	1000	-1000	r_1334
11	r_2924	0	1000	-1000	0	1000	-1000	r_1334
12	r_2925	0	1000	-1000	0	1000	-1000	r_1334
13	r_2926	0	1000	-1000	0	1000	-1000	r_1337
14	r_2927	0	1000	-1000	0	1000	-1000	r_1337
15	r_2928	0	1000	-1000	0	1000	-1000	r_1337
16	r_2928	0	1000	-1000	0	1000	-1000	r_1337
17	r_2929	0	1000	-1000	0	1000	-1000	r_1337
18	r_2930	0	1000	-1000	0	1000	-1000	r_1337
19	r_2931	0	1000	-1000	0	1000	-1000	r_1337
20	r_2932	0	1000	-1000	0	1000	-1000	r_1337
21	r_2933	0	1000	-1000	0	1000	-1000	r_1340
22	r_2934	0	1000	-1000	0	1000	-1000	r_1340
23	r_2935	0	1000	-1000	0	1000	-1000	r_1340
24	r_2936	0	1000	-1000	0	1000	-1000	r_1340
25	r_2937	0	1000	-1000	0	1000	-1000	r_1340
26	r_2937	0	1000	-1000	0	1000	-1000	r_1340
27	r_2938	0	1000	-1000	0	1000	-1000	r_1340
28	r_2939	0	1000	-1000	0	1000	-1000	r_1340
29	r_2940	0	1000	-1000	0	1000	-1000	r_1343
30	r_2941	0	1000	-1000	0	1000	-1000	r_1343
31	r_2942	0	1000	-1000	0	1000	-1000	r_1343
32	r_2943	0	1000	-1000	0	1000	-1000	r_1343
33	r_2944	0	1000	-1000	0	1000	-1000	r_1343
34	r_2945	0	1000	-1000	0	1000	-1000	r_1343
35	r_2946	0	1000	-1000	0	1000	-1000	r_1343
36	r_2947	0	1000	-1000	0	1000	-1000	r_1346
37	r_2947	0	1000	-1000	0	1000	-1000	r_1346
38	r_2948	-0.00038	1000	-1000	0	1000	-1000	r_1346
39	r_2949	0	1000	-1000	0	1000	-1000	r_1346
40	r_2950	0	1000	-1000	0	1000	-1000	r_1346
41	r_2951	0	1000	-1000	0	1000	-1000	r_1346
42	r_2952	0.00038	1000	-1000	0	1000	-1000	r_1346
43	r_2953	0	1000	-1000	0	1000	-1000	r_1346
44	r_2954	0	1000	-1000	0	1000	-1000	r_1348
45	r_2955	0	1000	-1000	0	1000	-1000	r_1348
46	r_2956	0	1000	-1000	0	1000	-1000	r_1349
47	r_2957	0	1000	-1000	0	1000	-1000	r_1349
48	r_2958	0	1000	-1000	0	1000	-1000	r_1349
49	r_2959	0	1000	-1000	0	1000	-1000	r_1349
50	r_2960	0	1000	-1000	0	1000	-1000	r_1349
51	r_2961	0	1000	-1000	0	1000	-1000	r_1349
52	r_2962	0	1000	-1000	0	1000	-1000	r_1350
53	r_2963	0	1000	-1000	0	1000	-1000	r_1350
54	r_2964	0	1000	-1000	0	1000	-1000	r_1350
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1								
2	r_2965	0	1000	-1000	0	1000	-1000	r_1350
3	r_2966	0	1000	-1000	0	1000	-1000	r_1350
4	r_2967	0	1000	-1000	0	1000	-1000	r_1351
5	r_2968	0	1000	-1000	0	1000	-1000	r_1351
6	r_2969	0	1000	-1000	0	1000	-1000	r_1351
7	r_2970	0	1000	-1000	0	1000	-1000	r_1351
8	r_2971	0	1000	-1000	0	1000	-1000	r_1352
9	r_2972	0	1000	-1000	0	1000	-1000	r_1352
10	r_2973	0	1000	-1000	0	1000	-1000	r_1352
11	r_2974	0	1000	-1000	0	1000	-1000	r_1352
12	r_2975	0	1000	-1000	0	1000	-1000	r_1352
13	r_2976	0	1000	-1000	0	1000	-1000	r_1353
14	r_2977	0	1000	-1000	0	1000	-1000	r_1353
15	r_2978	0	1000	-1000	0	1000	-1000	r_1353
16	r_2978	0	1000	-1000	0	1000	-1000	r_1353
17	r_2979	0	1000	-1000	0	1000	-1000	r_1353
18	r_2980	0	1000	-1000	0	1000	-1000	r_1353
19	r_2981	0	1000	-1000	0	1000	-1000	r_1355
20	r_2982	0	1000	-1000	0	1000	-1000	r_1355
21	r_2983	0	1000	-1000	0	1000	-1000	r_1355
22	r_2984	0	1000	-1000	0	1000	-1000	r_1356
23	r_2985	0	1000	-1000	0	1000	-1000	r_1356
24	r_2986	0	1000	-1000	0	1000	-1000	r_1356
25	r_2987	0	1000	-1000	0	1000	-1000	r_1356
26	r_2987	0	1000	-1000	0	1000	-1000	r_1356
27	r_2988	0	1000	-1000	0	1000	-1000	r_1372
28	r_2989	0	1000	-1000	0	1000	-1000	r_1372
29	r_2990	0	1000	-1000	0	1000	-1000	r_1374
30	r_2991	0	1000	-1000	0	1000	-1000	r_1374
31	r_2992	0	1000	-1000	0	1000	-1000	r_1374
32	r_2993	0	1000	-1000	0	1000	-1000	r_1374
33	r_2994	0	1000	-1000	0	1000	-1000	r_1374
34	r_2995	0	1000	-1000	0	1000	-1000	r_1374
35	r_2996	0	1000	-1000	0	1000	-1000	r_1375
36	r_2997	0	1000	-1000	0	1000	-1000	r_1375
37	r_2998	0	1000	-1000	0	1000	-1000	r_1375
38	r_2998	0	1000	-1000	0	1000	-1000	r_1375
39	r_2999	0	1000	-1000	0	1000	-1000	r_1375
40	r_3000	0	1000	-1000	0	1000	-1000	r_1375
41	r_3001	0	1000	-1000	0	1000	-1000	r_1375
42	r_3002	0	1000	-1000	0	1000	-1000	r_1376
43	r_3003	0	1000	-1000	0	1000	-1000	r_1376
44	r_3004	0	1000	-1000	0	1000	-1000	r_1376
45	r_3005	0	1000	-1000	0	1000	-1000	r_1376
46	r_3006	0	1000	-1000	0	1000	-1000	r_1377
47	r_3007	0	1000	-1000	0	1000	-1000	r_1377
48	r_3008	0	1000	-1000	0	1000	-1000	r_1377
49	r_3009	0	1000	-1000	0	1000	-1000	r_1377
50	r_3010	0	1000	-1000	0	1000	-1000	r_1380
51	r_3011	0	1000	-1000	0	1000	-1000	r_1381
52	r_3011	0	1000	-1000	0	1000	-1000	r_1381
53	r_3022	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_1381
54	r_3023	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_1381
55	r_3024	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_1382
56	r_3024	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_1382
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2	r_3025	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_1382
3	r_3026	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_1382
4	r_3027	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_1400
5	r_3028	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_1401
6	r_3029	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_1619
7	r_3030	0	1.13E-05	0	0.00E+00	3.97E-05	0	r_1838
8	r_3031	0	1.13E-05	0	0.00E+00	3.97E-05	0	r_1838
9	r_3032	0	1.13E-05	0	0.00E+00	3.97E-05	0	r_2029
10	r_3033	0	1.13E-05	0	0.00E+00	3.97E-05	0	r_2034
11	r_3034	0	1.07E-05	0	0.00E+00	3.78E-05	0	r_2034
12	r_3035	0	1.07E-05	0	0.00E+00	3.78E-05	0	r_2034
13	r_3036	0	1.07E-05	0	0.00E+00	3.78E-05	0	r_2079
14	r_3037	0	1.07E-05	0	0.00E+00	3.78E-05	0	r_2112
15	r_3038	0	1.07E-05	0	0.00E+00	3.78E-05	0	r_2115
16	r_3039	0	1.07E-05	0	0.00E+00	3.78E-05	0	r_2115
17	r_3040	0	1.07E-05	0	0.00E+00	3.78E-05	0	r_2116
18	r_3041	0	1.07E-05	0	0.00E+00	3.78E-05	0	r_2117
19	r_3042	0	1.07E-05	0	0.00E+00	3.78E-05	0	r_2118
20	r_3043	0	1.07E-05	0	0.00E+00	3.78E-05	0	r_2119
21	r_3044	0	1.07E-05	0	0.00E+00	3.78E-05	0	r_2126
22	r_3045	0	1.07E-05	0	0.00E+00	3.78E-05	0	r_2131
23	r_3046	0	0	0	0	0	0	r_2132
24	r_3047	0	0	0	0	0	0	r_2132
25	r_3048	0	0	0	0	0	0	r_2140
26	r_3049	0	0	0	0	0	0	r_2140
27	r_3050	0	0	0	0	0	0	r_2141
28	r_3051	0	0	0	0	0	0	r_2141
29	r_3052	0	0	0	0	0	0	r_2142
30	r_3053	0	0	0	0	0	0	r_2143
31	r_3054	0	0	0	0	0	0	r_2144
32	r_3055	0	0	0	0	0	0	r_2145
33	r_3056	0	0	0	0	0	0	r_2146
34	r_3057	0	0	0	0	0	0	r_2147
35	r_3058	0	0	0	0	0	0	r_2148
36	r_3059	0	0	0	0	0	0	r_2149
37	r_3060	0	0	0	0	0	0	r_2150
38	r_3061	0	0	0	0	0	0	r_2151
39	r_3062	0	0	0	0	0	0	r_2152
40	r_3063	0	0	0	0	0	0	r_2153
41	r_3064	0	0	0	0	0	0	r_2154
42	r_3065	0	0	0	0	0	0	r_2155
43	r_3066	0	0	0	0	0	0	r_2156
44	r_3067	0	0	0	0	0	0	r_2157
45	r_3068	0	0	0	0	0	0	r_2157
46	r_3069	0	0	0	0	0	0	r_2158
47	r_3070	0	1.14E-06	0	0.00E+00	4.06E-06	0	r_2158
48	r_3071	0	1.14E-06	0	0.00E+00	4.06E-06	0	r_2159
49	r_3072	0	1.14E-06	0	0.00E+00	4.06E-06	0	r_2159
50	r_3073	0	1.14E-06	0	0.00E+00	4.06E-06	0	r_2160
51	r_3074	0	1.14E-06	0	0.00E+00	4.06E-06	0	r_2161
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2	r_3075	0	1.14E-06	0	0.00E+00	4.06E-06	0
3	r_3076	0	1.14E-06	0	0.00E+00	4.06E-06	0
4	r_3077	0	1.14E-06	0	0.00E+00	4.06E-06	0
5	r_3078	0	1.14E-06	0	0.00E+00	4.06E-06	0
6	r_3079	0	1.14E-06	0	0.00E+00	4.06E-06	0
7	r_3080	0	1.14E-06	0	0.00E+00	4.06E-06	0
8	r_3081	0	1.14E-06	0	0.00E+00	4.06E-06	0
9	r_3082	0	0	0	0	0	0
10	r_3083	0	0	0	0	0	0
11	r_3084	0	0	0	0	0	0
12	r_3085	0	0	0	0	0	0
13	r_3086	0	0	0	0	0	0
14	r_3087	0	0	0	0	0	0
15	r_3088	0	0	0	0	0	0
16	r_3089	0	0	0	0	0	0
17	r_3090	0	0	0	0	0	0
18	r_3091	0	0	0	0	0	0
19	r_3092	0	0	0	0	0	0
20	r_3093	0	0	0	0	0	0
21	r_3094	0	0	0	0	0	0
22	r_3095	0	0	0	0	0	0
23	r_3096	0	0	0	0	0	0
24	r_3097	0	0	0	0	0	0
25	r_3098	0	5.36E-05	0	0	0.000117	0
26	r_3099	0	3.69E-05	0	0.00E+00	9.93E-05	0
27	r_3100	0	4.05E-05	0	0	0.000103	0
28	r_3101	0	3.69E-05	0	0.00E+00	9.93E-05	0
29	r_3102	0	4.05E-05	0	0	0.000103	0
30	r_3103	0	3.69E-05	0	0.00E+00	9.93E-05	0
31	r_3104	0	4.22E-05	0	0	0.000114	0
32	r_3105	0	4.22E-05	0	0	0.000114	0
33	r_3106	0	4.22E-05	0	0	0.000114	0
34	r_3107	0	4.22E-05	0	0	0.000114	0
35	r_3108	0	4.22E-05	0	0	0.000114	0
36	r_3109	0	4.22E-05	0	0	0.000114	0
37	r_3110	0	4.22E-05	0	0	0.000114	0
38	r_3111	0	4.22E-05	0	0	0.000114	0
39	r_3112	0	2.40E-05	0	0.00E+00	8.54E-05	0
40	r_3113	0	2.40E-05	0	0.00E+00	8.54E-05	0
41	r_3114	0	2.40E-05	0	0.00E+00	8.54E-05	0
42	r_3115	0	2.40E-05	0	0.00E+00	8.54E-05	0
43	r_3116	0	2.40E-05	0	0.00E+00	8.54E-05	0
44	r_3117	0	2.40E-05	0	0.00E+00	8.54E-05	0
45	r_3118	0	2.40E-05	0	0.00E+00	8.54E-05	0
46	r_3119	0	2.40E-05	0	0.00E+00	8.54E-05	0
47	r_3120	0	2.40E-05	0	0.00E+00	8.54E-05	0
48	r_3121	0	2.40E-05	0	0.00E+00	8.54E-05	0
49	r_3122	0	2.40E-05	0	0.00E+00	8.54E-05	0
50	r_3123	0	2.40E-05	0	0.00E+00	8.54E-05	0
51	r_3124	0	2.40E-05	0	0.00E+00	8.54E-05	0

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2	r_3125	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2212
3	r_3126	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2213
4	r_3127	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2214
5	r_3128	0	4.80E-05	0	0	0.000171	0	r_2215
6	r_3129	0	4.80E-05	0	0	0.000171	0	r_2216
7	r_3130	0	4.80E-05	0	0	0.000171	0	r_2217
8	r_3131	0	4.80E-05	0	0	0.000171	0	r_2218
9	r_3132	0	4.80E-05	0	0	0.000171	0	r_2219
10	r_3133	0	4.80E-05	0	0	0.000171	0	r_2219
11	r_3134	0	4.80E-05	0	0	0.000171	0	r_2220
12	r_3135	0	4.80E-05	0	0	0.000171	0	r_2220
13	r_3136	0	4.80E-05	0	0	0.000171	0	r_2221
14	r_3137	0	4.80E-05	0	0	0.000171	0	r_2221
15	r_3138	0	4.80E-05	0	0	0.000171	0	r_2222
16	r_3139	0	4.80E-05	0	0	0.000171	0	r_2222
17	r_3140	0	4.80E-05	0	0	0.000171	0	r_2223
18	r_3141	0	4.80E-05	0	0	0.000171	0	r_2223
19	r_3142	0	4.80E-05	0	0	0.000171	0	r_2224
20	r_3143	0	4.80E-05	0	0	0.000171	0	r_2224
21	r_3144	0	4.80E-05	0	0	0.000171	0	r_2225
22	r_3145	0	4.80E-05	0	0	0.000171	0	r_2225
23	r_3146	0	4.80E-05	0	0	0.000171	0	r_2226
24	r_3147	0	4.80E-05	0	0	0.000171	0	r_2226
25	r_3148	0	4.80E-05	0	0	0.000171	0	r_2227
26	r_3149	0	4.80E-05	0	0	0.000171	0	r_2227
27	r_3150	0	4.80E-05	0	0	0.000171	0	r_2228
28	r_3151	0	4.80E-05	0	0	0.000171	0	r_2228
29	r_3152	0	4.80E-05	0	0	0.000171	0	r_2232
30	r_3153	0	4.80E-05	0	0	0.000171	0	r_2233
31	r_3154	0	4.80E-05	0	0	0.000171	0	r_2234
32	r_3155	0	4.80E-05	0	0	0.000171	0	r_2235
33	r_3156	0	4.80E-05	0	0	0.000171	0	r_2236
34	r_3157	0	4.80E-05	0	0	0.000171	0	r_2237
35	r_3158	0	4.80E-05	0	0	0.000171	0	r_2238
36	r_3159	0	4.80E-05	0	0	0.000171	0	r_2239
37	r_3160	0	4.80E-05	0	0	0.000171	0	r_2240
38	r_3161	0	4.80E-05	0	0	0.000171	0	r_2241
39	r_3162	0	4.80E-05	0	0	0.000171	0	r_2242
40	r_3163	0	4.80E-05	0	0	0.000171	0	r_2243
41	r_3164	0	4.80E-05	0	0	0.000171	0	r_2244
42	r_3165	0	4.80E-05	0	0	0.000171	0	r_2245
43	r_3166	0	4.80E-05	0	0	0.000171	0	r_2246
44	r_3167	0	4.80E-05	0	0	0.000171	0	r_2247
45	r_3168	0	4.80E-05	0	0	0.000171	0	r_2248
46	r_3169	0	4.80E-05	0	0	0.000171	0	r_2249
47	r_3170	0	4.80E-05	0	0	0.000171	0	r_2250
48	r_3171	0	4.80E-05	0	0	0.000171	0	r_2251
49	r_3172	0	4.80E-05	0	0	0.000171	0	r_2252
50	r_3173	0	4.80E-05	0	0	0.000171	0	r_2253
51	r_3174	0	4.80E-05	0	0	0.000171	0	r_2254
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2	r_3175	0	4.80E-05	0	0	0.000171	0	r_2255
3	r_3176	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2256
4	r_3177	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2257
5	r_3178	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2258
6	r_3179	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2259
7	r_3180	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2260
8	r_3181	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2261
9	r_3182	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2262
10	r_3183	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2263
11	r_3184	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2264
12	r_3185	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2265
13	r_3186	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2266
14	r_3187	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2267
15	r_3188	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2268
16	r_3189	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2269
17	r_3190	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2270
18	r_3191	0	2.40E-05	0	0.00E+00	8.54E-05	0	r_2271
19	r_3192	0	4.80E-05	0	0	0.000171	0	r_2272
20	r_3193	0	4.80E-05	0	0	0.000171	0	r_2273
21	r_3194	0	4.80E-05	0	0	0.000171	0	r_2274
22	r_3195	0	4.80E-05	0	0	0.000171	0	r_2275
23	r_3196	0	4.80E-05	0	0	0.000171	0	r_2276
24	r_3197	0	4.80E-05	0	0	0.000171	0	r_2277
25	r_3198	0	4.80E-05	0	0	0.000171	0	r_2278
26	r_3199	0	4.80E-05	0	0	0.000171	0	r_2279
27	r_3200	0	4.80E-05	0	0	0.000171	0	r_2280
28	r_3201	0	4.80E-05	0	0	0.000171	0	r_2281
29	r_3202	0	4.80E-05	0	0	0.000171	0	r_2282
30	r_3203	0	4.80E-05	0	0	0.000171	0	r_2283
31	r_3204	0	4.80E-05	0	0	0.000171	0	r_2284
32	r_3205	0	4.80E-05	0	0	0.000171	0	r_2285
33	r_3206	0	4.80E-05	0	0	0.000171	0	r_2286
34	r_3207	0	4.80E-05	0	0	0.000171	0	r_2287
35	r_3208	0	4.80E-05	0	0	0.000171	0	r_2288
36	r_3209	0	4.80E-05	0	0	0.000171	0	r_2289
37	r_3210	0	4.80E-05	0	0	0.000171	0	r_2290
38	r_3211	0	4.80E-05	0	0	0.000171	0	r_2291
39	r_3212	0	4.80E-05	0	0	0.000171	0	r_2292
40	r_3213	0	4.80E-05	0	0	0.000171	0	r_2293
41	r_3214	0	4.80E-05	0	0	0.000171	0	r_2294
42	r_3215	0	4.80E-05	0	0	0.000171	0	r_2295
43	r_3216	0	4.80E-05	0	0	0.000171	0	r_2296
44	r_3217	0	4.80E-05	0	0	0.000171	0	r_2297
45	r_3218	0	4.80E-05	0	0	0.000171	0	r_2298
46	r_3219	0	4.80E-05	0	0	0.000171	0	r_2299
47	r_3220	0	4.80E-05	0	0	0.000171	0	r_2300
48	r_3221	0	4.80E-05	0	0	0.000171	0	r_2301
49	r_3222	0	4.80E-05	0	0	0.000171	0	r_2302
50	r_3223	0	4.80E-05	0	0	0.000171	0	r_2303
51	r_3224	0	4.80E-05	0	0	0.000171	0	r_2304
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2	r_3225	0	4.80E-05	0	0	0.000171	0	r_2305
3	r_3226	0	4.80E-05	0	0	0.000171	0	r_2308
4	r_3227	0	4.80E-05	0	0	0.000171	0	r_2308
5	r_3228	0	4.80E-05	0	0	0.000171	0	r_2309
6	r_3229	0	4.80E-05	0	0	0.000171	0	r_2309
7	r_3230	0	4.80E-05	0	0	0.000171	0	r_2310
8	r_3231	0	4.80E-05	0	0	0.000171	0	r_2311
9	r_3232	0	4.80E-05	0	0	0.000171	0	r_2312
10	r_3233	0	4.80E-05	0	0	0.000171	0	r_2312
11	r_3234	0	4.80E-05	0	0	0.000171	0	r_2313
12	r_3235	0	4.80E-05	0	0	0.000171	0	r_2313
13	r_3236	0	4.80E-05	0	0	0.000171	0	r_2314
14	r_3237	0	4.80E-05	0	0	0.000171	0	r_2315
15	r_3238	0	4.80E-05	0	0	0.000171	0	r_2316
16	r_3239	0	4.80E-05	0	0	0.000171	0	r_2317
17	r_3240	0	0	0	0	0	0	r_2318
18	r_3241	0	0	0	0	0	0	r_2319
19	r_3242	0	0	0	0	0	0	r_2320
20	r_3243	0	0	0	0	0	0	r_2321
21	r_3244	0	0	0	0	0	0	r_2322
22	r_3245	0	0	0	0	0	0	r_2323
23	r_3246	0	0	0	0	0	0	r_2324
24	r_3247	0	0	0	0	0	0	r_2325
25	r_3248	0	0	0	0	0	0	r_2326
26	r_3249	0	0	0	0	0	0	r_2327
27	r_3250	0	0	0	0	0	0	r_2328
28	r_3251	0	0	0	0	0	0	r_2329
29	r_3252	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2330
30	r_3253	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2331
31	r_3254	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2332
32	r_3255	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2333
33	r_3256	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2333
34	r_3257	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2334
35	r_3258	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2335
36	r_3259	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2335
37	r_3260	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2336
38	r_3261	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2337
39	r_3262	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2337
40	r_3263	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2338
41	r_3264	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2339
42	r_3265	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2339
43	r_3266	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2340
44	r_3267	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2340
45	r_3268	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2340
46	r_3269	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2341
47	r_3270	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2341
48	r_3271	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2341
49	r_3272	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2342
50	r_3273	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2342
51	r_3274	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2342
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2	r_3275	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2343
3	r_3276	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2343
4	r_3277	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2343
5	r_3278	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2344
6	r_3279	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2345
7	r_3280	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2346
8	r_3281	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2347
9	r_3282	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2348
10	r_3283	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2349
11	r_3284	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2350
12	r_3285	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2351
13	r_3286	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2352
14	r_3287	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2353
15	r_3288	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2354
16	r_3289	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2355
17	r_3290	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2356
18	r_3291	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2357
19	r_3292	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2358
20	r_3293	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2359
21	r_3294	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2360
22	r_3295	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2361
23	r_3296	0	1.19E-05	0	0.00E+00	4.22E-05	0 r_2362
24	r_3297	0	1.19E-05	0	0.00E+00	4.22E-05	0 r_2363
25	r_3298	0	1.19E-05	0	0.00E+00	4.22E-05	0 r_2364
26	r_3299	0	1.19E-05	0	0.00E+00	4.22E-05	0 r_2365
27	r_3300	0	1.19E-05	0	0.00E+00	4.22E-05	0 r_2366
28	r_3301	0	1.19E-05	0	0.00E+00	4.22E-05	0 r_2367
29	r_3302	0	1.19E-05	0	0.00E+00	4.22E-05	0 r_2368
30	r_3303	0	1.19E-05	0	0.00E+00	4.22E-05	0 r_2368
31	r_3304	0	0	0	0	0	0 r_2368
32	r_3305	0	0	0	0	0	0 r_2369
33	r_3306	0	0	0	0	0	0 r_2369
34	r_3307	0	0	0	0	0	0 r_2369
35	r_3308	0	1.19E-05	0	0.00E+00	4.22E-05	0 r_2370
36	r_3309	0	1.19E-05	0	0.00E+00	4.22E-05	0 r_2370
37	r_3310	0	1.19E-05	0	0.00E+00	4.22E-05	0 r_2370
38	r_3311	0	1.19E-05	0	0.00E+00	4.22E-05	0 r_2371
39	r_3312	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2371
40	r_3313	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2371
41	r_3314	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2372
42	r_3315	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2372
43	r_3316	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2372
44	r_3317	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2373
45	r_3318	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2373
46	r_3319	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2373
47	r_3320	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2374
48	r_3321	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2374
49	r_3322	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2374
50	r_3323	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2375
51	r_3324	0	2.74E-05	0	0.00E+00	9.77E-05	0 r_2375

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2	r_3325	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2375
3	r_3326	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2376
4	r_3327	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2376
5	r_3328	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2376
6	r_3329	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2377
7	r_3330	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2377
8	r_3331	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_2377
9	r_4039	0	3.69E-05	-4.84E-05	0	0.000131	-0.00017	r_2378
10	r_4042	0	0	0	0	0	0	r_2378
11	r_4045	0	4.80E-05	0	0	0.000171	0	r_2378
12	r_0964	0	4.80E-05	0	0	0.000171	0	r_2379
13	r_1028	0	0	0	0	0	0	r_2379
14	r_1085	0	4.80E-05	0	0	0.000171	0	r_2379
15	r_1086	0	4.80E-05	0	0	0.000171	0	r_2380
16	r_1096	0	0	-1.76E-06	0	0	-6.27E-06	r_2380
17	r_1097	0	2.41E-06	0	0.00E+00	8.59E-06	0	r_2380
18	r_1098	0	1.23E-06	0	0.00E+00	4.38E-06	0	r_2381
19	r_1099	0.02518	0.0251814	0.02518	0.027119	0.027125	0.027119	r_2381
20	r_1100	0	0	0	0	0	0	r_2381
21	r_1101	0	0	0	0	0	0	r_2382
22	r_1103	0	0	0	0	0	0	r_2382
23	r_1104	0	0	0	0	0	0	r_2382
24	r_1106	0	6.62E-06	0	0.00E+00	2.36E-05	0	r_2383
25	r_1107	0	2.44E-06	0	0.00E+00	8.67E-06	0	r_2383
26	r_1108	0	0	0	0	0	0	r_2383
27	r_1109	0	0	0	0	0	0	r_2384
28	r_1110	6.042536	6.0427056	6.042456	6.115352	6.115956	6.115184	r_2384
29	r_1111	0	0	0	0	0	0	r_2384
30	r_1112	-0.13332	1000	-1000	-0.1273	1000	-1000	r_2385
31	r_1113	0	0	0	0	0	0	r_2385
32	r_1114	0	0	0	0	0	0	r_2385
33	r_1115	0.597736	0.5977533	0.597731	5.30E-01	5.30E-01	0.529737	r_2386
34	r_1116	0	2.74E-05	0	0	9.77E-05	0	r_2386
35	r_1118	0	1000	0	0	1000	0	r_2386
36	r_1119	0	0	0	0	0	0	r_2387
37	r_1120	0	3.69E-05	0	0	0.000131	0	r_2387
38	r_1121	0	6.12E-05	0	3.59E-05	0.000134	0	r_2387
39	r_1122	0	6.12E-05	0	0	0.000134	0	r_2388
40	r_1123	0	6.12E-05	0	0	0.000134	0	r_2388
41	r_1124	3.33E-05	6.12E-05	0	0	0.000134	0	r_2388
42	r_1125	0	0	0	0	0	0	r_2389
43	r_1126	-0.08963	1000	-1000	-0.09654	1000	-1000	r_2389
44	r_1127	-0.03838	-0.038185	-0.03838	-0.02504	-0.02436	-0.02505	r_2389
45	r_1128	0	1000	-1000	0	1000	-1000	r_2390
46	r_1129	0.003616	0.0036396	0.003603	0.003895	0.003957	0.003848	r_2390
47	r_1130	0	5.36E-05	0	0	0.000117	0	r_2390
48	r_1131	0	4.76E-05	0	0	0.000104	0	r_2391
49	r_1132	0	0	0	0	0	0	r_2391
50	r_1133	0	0	0	0	0	0	r_2391
51	r_1134	0	0	0	0	0	0	r_2392
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2	r_1135	0	0	0	0	0	0.00E+00	r_2392
3	r_1136	0	0	-3.78E-06	0	0	-1.3E-05	r_2392
4	r_1137	0	0.2676	0	0.00E+00	2.89E-01	0	r_2393
5	r_1138	0	1.92E-05	-0.2676	0	6.84E-05	-0.28869	r_2393
6	r_1139	0	0	0	0	0	0.00E+00	r_2393
7	r_1146	0	0	-2.32E-07	0	0	-8.26E-07	r_2394
8	r_1147	0	0	-2.30E-07	0	0	-8.2E-07	r_2394
9	r_1148	0	1000	-1000	0	1000	-1000	r_2394
10	r_1149	0	0	0	0	0	0	r_2395
11	r_1151	0	0	0	0	0	0.00E+00	r_2395
12	r_1161	0	0	-2.32E-07	0	0	-8.3E-07	r_2395
13	r_1162	0	0	0	0	0	0	r_2396
14	r_1164	0	0	0	0	0	0	r_2396
15	r_1165	0	0	0	0	0	0	r_2396
16	r_1166	1	1	0.999998	1	1	0.999993	r_2397
17	r_1167	0	0	0	0	0	0	r_2397
18	r_1168	0	0	-4.80E-05	0	0	-1.71E-04	r_2397
19	r_1169	0	0	-1.14E-06	0	0	-4.06E-06	r_2398
20	r_1170	0	0	-8.68E-07	0	0	-3.1E-06	r_2398
21	r_1171	0	1000	0	0	1000	0	r_2398
22	r_1172	0	1000	0	0	1000	0.00E+00	r_2399
23	r_1173	0	0	-7.75E-06	0.00E+00	0.00E+00	-2.8E-05	r_2399
24	r_1174	0	2.74E-05	0	0	9.77E-05	0	r_2399
25	r_1175	0	3.87E-05	0	0	0.000137	0.00E+00	r_2400
26	r_1176	0	0	-2.22E-06	0	0	-7.9E-06	r_2401
27	r_1177	0	0	0	0.00E+00	0.00E+00	0.00E+00	r_2402
28	r_1179	0	8.80E-08	0	9.48E-08	9.48E-08	9.48E-08	r_2403
29	r_1180	0	1.30E-06	0	0	4.61E-06	0	r_2404
30	r_1181	0	1.56E-06	0	0	5.54E-06	0.00E+00	r_2405
31	r_1182	0.00E+00	0.00E+00	0.00E+00	0	0	0.00E+00	r_2406
32	r_1183	0.00E+00	0.00E+00	-4.31E-06	0	0	-1.5E-05	r_2407
33	r_1184	0	0	-1.72E-06	0	0	-6.10E-06	r_2408
34	r_1185	0	0	0	0	0	0	r_2409
35	r_1186	0	0	-1.75E-05	0	0	-6.2E-05	r_2410
36	r_1187	0	1000	0	0	1000	0	r_2411
37	r_1188	0	1000	0	0.00E+00	1.00E+03	0.00E+00	r_2412
38	r_1189	0	0	0	0	0	0	r_2413
39	r_1190	0	1.75E-05	-3.95E-06	0	6.21E-05	-1.41E-05	r_2414
40	r_1191	0	0	0	0	0	0	r_2415
41	r_1192	0	0	-1.36E-07	0	0	-8.1E-06	r_2416
42	r_1193	0	0	0	0	0	0	r_2417
43	r_1194	0.067006	0.0671664	0.066814	0.055879	0.056448	5.52E-02	r_2418
44	r_1195	0	0	0	0	0	0	r_2419
45	r_1196	0	0	-2.65E-06	0	0	-9.4E-06	r_2420
46	r_1197	0	1000	0	0	1000	0.00E+00	r_2421
47	r_1198	0	1000	0	0	1000	0	r_2422
48	r_1199	0	0	-2.51E-06	0	0	-8.92E-06	r_2423
49	r_1200	0	0	0	0	0	0	r_2424
50	r_1201	0	0	-1.72E-06	0	0	-6.1E-06	r_2425
51	r_1202	0	1000	-1000	0	1000	-1000	r_2426

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2	r_1203	0	1000	0	0	1000	0.00E+00		r_2427
3	r_1204	0	1000	0	0	1000	0		r_2428
4	r_1205	0	0	-1.58E-06	0	0	-5.6E-06		r_2429
5	r_1206	0	0	0	0	0	0		r_2430
6	r_1207	0	0	0	0	0	0		r_2431
7	r_1208	0	1000	-1000	0	1000	-1000		r_2432
8	r_1209	0	1000	0	0	1000	0.00E+00		r_2433
9	r_1210	0	1000	0	0	1000	0		r_2434
10	r_1211	0	0	-1.69E-06	0	0	-6.00E-06		r_2435
11	r_1212	0	0	0	0	0	0.00E+00		r_2436
12	r_1213	0	0	-1.56E-06	0	0	-5.57E-06		r_2437
13	r_1214	0	0	-1.31E-07	0	0	-4.95E-06		r_2438
14	r_1215	0	0	-1.15E-06	0	0	-4.10E-06		r_2439
15	r_1216	0	0	-2.11E-06	0	0	-7.50E-06		r_2440
16	r_1217	0	0	-4.51E-06	0	0	-1.60E-05		r_2441
17	r_1218	0	0	-2.73E-06	0	0	-9.7E-06		r_2442
18	r_1219	0	0	-9.29E-07	0	0	-3.3E-06		r_2443
19	r_1220	0	1000	-1000	0	1000	-1000		r_2444
20	r_1221	0	1000	0	0	1000	0.00E+00		r_2445
21	r_1222	0	1000	0	0	1000	0.00E+00		r_2446
22	r_1223	0	0	-1.21E-06	0	0	-4.30E-06		r_2447
23	r_1224	0	0	-2.15E-06	0	0	-7.7E-06		r_2448
24	r_1225	0	0	-2.68E-07	0	0	-9.5E-07		r_2449
25	r_1226	0	0.0001921	0	0.00E+00	6.84E-04	0		r_2450
26	r_1227	0	0	0	0	0	0		r_2451
27	r_1228	0	5.56E-07	0	0	1.98E-06	0		r_2452
28	r_1229	0	0	0	0	0	0		r_2453
29	r_1230	0	0	0	0	0	0		r_2454
30	r_1231	0	0	0	0	0	0		r_2455
31	r_1232	0	0	0	0.00E+00	0.00E+00	0.00E+00		r_2456
32	r_1233	0	0	0	0	0	0		r_2457
33	r_1234	0	1.08E-05	-1.75E-05	0	3.84E-05	-6.21E-05		r_2458
34	r_1235	0.028629	0.0286578	0.028437	0.030834	0.030937	0.03015		r_2459
35	r_1236	0	0	-2.11E-06	0	0	-7.50E-06		r_2460
36	r_1237	0	0.0001921	0	0	0.000684	0		r_2461
37	r_1238	0	0	-9.33E-07	0.00E+00	0.00E+00	-3.3E-06		r_2462
38	r_1239	0	0	0	0	0	0		r_2463
39	r_1240	0	9.57E-07	0	0	3.4E-06	0		r_2464
40	r_1241	0.11521	0.1152125	0.115205	0.075217	0.075228	0.075203		r_2465
41	r_1242	4.342508	4.3428733	4.342403	4.463558	4.464858	4.463238		r_2466
42	r_1243	0	0	0	0	0	0.00E+00		r_2467
43	r_1244	0	1000	0	0	1000	0		r_2468
44	r_1245	0	1000	-2.11E-06	0	1000	-7.5E-06		r_2469
45	r_1246	0	0	0	0	0	0.00E+00		r_2470
46	r_1247	0	0	0	0	0	0		r_2471
47	r_1248	0	0	-5.22E-06	0	0	-1.9E-05		r_2472
48	r_1249	0	0	0	0	0	0		r_2473
49	r_1250	0	0	0	0	0	0		r_2474
50	r_1251	0	0	0	0	0	0		r_2475
51	r_1252	0	0	0	0	0	0.00E+00		r_2476
52	r_1253	0	0	0	0	0	0		
53	r_1254	0	0	0	0	0	0		
54	r_1255	0	0	0	0	0	0		
55	r_1256	0	0	0	0	0	0		
56	r_1257	0	0	0	0	0	0.00E+00		
57	r_1258	0	0	0	0	0	0.00E+00		
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2	r_1259	0	1000	0	0	1000	0	r_2477
3	r_1260	0	1000	-1.02E-06	0	1000	-3.62E-06	r_2478
4	r_1261	0	0	0	0	0	0	r_2479
5	r_1262	0	0	-6.70E-07	0	0	-2.4E-06	r_2480
6	r_1263	0	0	0	0	0	0	r_2481
7	r_1264	0	0.0001921	0	0	0.000684	0	r_2482
8	r_1265	2.985696	3.8199085	0.009538	3.87E+00	3.87E+00	0.009796	r_2483
9	r_1266	0.006801	0.006813	0.006801	0.007325	0.007368	0.007325	r_2484
10	r_1267	0	1.22E-05	0	0	4.33E-05	0	r_2485
11	r_1268	0	0	0	0	0	0	r_2486
12	r_1269	0	0	0	0	0	0	r_2487
13	r_1270	0	0	0	0	0	0	r_2488
14	r_1271	0	0	0	0	0	0.00E+00	r_2488
15	r_1272	0	0	0	0	0	0	r_2489
16	r_1272	0	0	0	0	0	0	r_2489
17	r_1273	0	0	-9.24E-06	0	0	-3.3E-05	r_2489
18	r_1274	0	0	0	0	0	0	r_2490
19	r_1275	0	0	0	0	0	0	r_2490
20	r_1276	0	0	0	0	0	0.00E+00	r_2491
21	r_1277	-3.72208	-3.722019	-3.72213	-3.53034	-3.53013	-3.53053	r_2491
22	r_1278	0	0	-2.43E-07	0	0	-8.6E-07	r_2492
23	r_1279	-0.02608	1000	-1000	-0.02809	1000	-1000	r_2492
24	r_1280	0	1000	-1000	0	1000	-1000	r_2493
25	r_1281	-0.03961	1000	-1000	-0.05895	1000	-1000	r_2493
26	r_1657	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_2494
27	r_2034	0.267408	2.68E-01	0	0.288005	0.288687	0	r_2494
28	r_2079	0	9.69E-07	0	0.00E+00	3.45E-06	0	r_2495
29	r_2132	0	1.00E+03	0	0.00E+00	1.00E+03	0	r_2495
30	r_2219	0	1.75E-05	0	0.00E+00	6.21E-05	0	r_2496
31	r_2220	0	1.75E-05	0	0.00E+00	6.21E-05	0	r_2497
32	r_2221	0	1.75E-05	0	0.00E+00	6.21E-05	0	r_2498
33	r_2222	0	1.75E-05	0	0.00E+00	6.21E-05	0	r_2499
34	r_2223	0	1.75E-05	0	0.00E+00	6.21E-05	0	r_2500
35	r_2224	0	1.75E-05	0	0.00E+00	6.21E-05	0	r_2501
36	r_2225	0	6.67E-06	0	0.00E+00	2.37E-05	0	r_2502
37	r_2226	0	4.12E-06	0	0.00E+00	1.47E-05	0	r_2503
38	r_2227	0	2.98E-06	0	0.00E+00	1.06E-05	0	r_2504
39	r_2228	0	2.34E-06	0	0.00E+00	8.32E-06	0	r_2505
40	r_3348	3.79E-05	3.79E-05	0	4.08E-05	4.08E-05	0	r_2506
41	r_3349	0	3.79E-05	0	0.00E+00	4.08E-05	0	r_2507
42	r_3350	0	3.79E-05	0	0.00E+00	4.08E-05	0	r_2508
43	r_3351	0	3.79E-05	0	0.00E+00	4.08E-05	0	r_2509
44	r_3352	0	3.79E-05	0	0.00E+00	4.08E-05	0	r_2510
45	r_3353	0	3.79E-05	0	0.00E+00	4.08E-05	0	r_2511
46	r_3354	0.00E+00	3.791E-05	0	0.00E+00	4.08E-05	0	r_2512
47	r_3355	0	3.79E-05	0	0.00E+00	4.08E-05	0	r_2513
48	r_3356	0.00E+00	2.25E-05	0.00E+00	0.00E+00	3.95E-05	0	r_2514
49	r_3357	0	2.02E-05	0	0.00E+00	3.95E-05	0	r_2515
50	r_3358	0.00E+00	2.02E-05	0.00E+00	0.00E+00	3.95E-05	0	r_2516
51	r_3359	0	2.02E-05	0	0.00E+00	3.95E-05	0	r_2517
52	r_3360	0	2.02E-05	0	0.00E+00	3.95E-05	0	r_2518
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2	r_3361	0	2.02E-05	0	0.00E+00	3.95E-05	0	r_2519
3	r_3362	0	2.02E-05	0	0.00E+00	3.95E-05	0	r_2520
4	r_3363	0	2.02E-05	0	0.00E+00	3.95E-05	0	r_2521
5	r_3364	0	2.46E-05	0	0.00E+00	4.08E-05	0	r_2522
6	r_3365	0	2.18E-05	0	0.00E+00	4.08E-05	0	r_2523
7	r_3366	0.00E+00	2.18E-05	0.00E+00	0.00E+00	4.08E-05	0	r_2524
8	r_3367	0	2.18E-05	0	0.00E+00	4.08E-05	0	r_2525
9	r_3368	0	2.18E-05	0	0.00E+00	4.08E-05	0	r_2526
10	r_3369	0	2.18E-05	0	0.00E+00	4.08E-05	0	r_2527
11	r_3370	0	2.18E-05	0	0.00E+00	4.08E-05	0	r_2528
12	r_3371	0	2.18E-05	0	0.00E+00	4.08E-05	0	r_2528
13	r_3372	0	1.18E-05	0	0.00E+00	3.95E-05	0	r_2529
14	r_3373	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2529
15	r_3374	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2530
16	r_3375	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2530
17	r_3376	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2531
18	r_3377	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2531
19	r_3378	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2532
20	r_3379	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2532
21	r_3380	0	2.46E-05	0	0.00E+00	4.08E-05	0	r_2533
22	r_3381	0	2.18E-05	0	0.00E+00	4.08E-05	0	r_2533
23	r_3382	0	2.18E-05	0	0.00E+00	4.08E-05	0	r_2534
24	r_3383	0	2.18E-05	0	0.00E+00	4.08E-05	0	r_2534
25	r_3384	0	2.18E-05	0	0.00E+00	4.08E-05	0	r_2535
26	r_3385	0	2.18E-05	0	0.00E+00	4.08E-05	0	r_2535
27	r_3386	0	2.18E-05	0	0.00E+00	4.08E-05	0	r_2536
28	r_3387	0	2.18E-05	0	0.00E+00	4.08E-05	0	r_2537
29	r_3388	0	1.18E-05	0	0.00E+00	3.95E-05	0	r_2538
30	r_3389	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2539
31	r_3390	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2540
32	r_3391	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2541
33	r_3392	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2542
34	r_3393	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2543
35	r_3394	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2544
36	r_3395	0	1.11E-05	0	0.00E+00	3.94E-05	0	r_2545
37	r_3396	0	1.23E-05	0	0.00E+00	4.08E-05	0	r_2546
38	r_3397	0	1.16E-05	0	0.00E+00	4.05E-05	0	r_2547
39	r_3398	0	1.16E-05	0	0.00E+00	4.07E-05	0	r_2548
40	r_3399	0	1.16E-05	0	0.00E+00	4.05E-05	0	r_2549
41	r_3400	0	1.16E-05	0	0.00E+00	4.07E-05	0	r_2550
42	r_3401	0	1.16E-05	0	0.00E+00	4.05E-05	0	r_2551
43	r_3402	0	1.16E-05	0	0.00E+00	4.05E-05	0	r_2552
44	r_3403	0	1.16E-05	0	0.00E+00	4.05E-05	0	r_2553
45	r_3404	0	7.96E-06	0	0.00E+00	2.83E-05	0	r_2554
46	r_3405	0	7.64E-06	0	0.00E+00	2.72E-05	0	r_2555
47	r_3406	0	7.64E-06	0	0.00E+00	2.72E-05	0	r_2556
48	r_3407	0	7.64E-06	0	0.00E+00	2.72E-05	0	r_2557
49	r_3408	0	7.64E-06	0	0.00E+00	2.72E-05	0	r_2558
50	r_3409	0.00E+00	7.64E-06	0.00E+00	0.00E+00	2.72E-05	0	r_2559
51	r_3410	0	7.64E-06	0	0.00E+00	2.72E-05	0	r_2560
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2	r_3411	0	7.64E-06	0	0.00E+00	2.72E-05	0
3	r_3412	0	8.21E-06	0	0.00E+00	2.92E-05	0
4	r_3413	0	7.87E-06	0	0.00E+00	2.80E-05	0
5	r_3414	0	7.87E-06	0	0.00E+00	2.80E-05	0
6	r_3415	0	7.87E-06	0	0.00E+00	2.80E-05	0
7	r_3416	0	7.87E-06	0	0.00E+00	2.80E-05	0
8	r_3417	0	7.87E-06	0	0.00E+00	2.80E-05	0
9	r_3418	0	7.87E-06	0	0.00E+00	2.80E-05	0
10	r_3419	0	7.87E-06	0	0.00E+00	2.80E-05	0
11	r_3420	0	6.02E-06	0	0.00E+00	2.14E-05	0
12	r_3421	0	5.83E-06	0	0.00E+00	2.08E-05	0
13	r_3422	0	5.83E-06	0	0.00E+00	2.08E-05	0
14	r_3423	0	5.83E-06	0	0.00E+00	2.08E-05	0
15	r_3424	0	5.83E-06	0	0.00E+00	2.08E-05	0
16	r_3425	0	5.83E-06	0	0.00E+00	2.08E-05	0
17	r_3426	0	5.83E-06	0	0.00E+00	2.08E-05	0
18	r_3427	0	5.83E-06	0	0.00E+00	2.08E-05	0
19	r_3428	3.79E-05	9.91E-05	0	4.08E-05	1.75E-04	0
20	r_3429	0	5.84E-05	0	0.00E+00	1.31E-04	0
21	r_3430	0	6.60E-05	0	0.00E+00	1.40E-04	0
22	r_3431	0	5.84E-05	0	0.00E+00	1.31E-04	0
23	r_3432	0	6.60E-05	0	0.00E+00	1.40E-04	0
24	r_3433	0	5.84E-05	0	0.00E+00	1.31E-04	0
25	r_3434	0	5.84E-05	0	0.00E+00	1.31E-04	0
26	r_3435	0	5.84E-05	0	0.00E+00	1.31E-04	0
27	r_3436	0.00E+00	6.12E-05	0.00E+00	0.00E+00	1.34E-04	0
28	r_3437	0	4.219E-05	0	0.00E+00	1.14E-04	0
29	r_3438	0.00E+00	4.62E-05	0.00E+00	0.00E+00	1.18E-04	0
30	r_3439	0	4.219E-05	0	0.00E+00	1.14E-04	0
31	r_3440	0.00E+00	4.62E-05	0.00E+00	0.00E+00	1.18E-04	0
32	r_3441	0	4.219E-05	0	0.00E+00	1.14E-04	0
33	r_3442	0	4.219E-05	0	0.00E+00	1.14E-04	0
34	r_3443	0	4.219E-05	0	0.00E+00	1.14E-04	0
35	r_3444	0	6.122E-05	0	3.59E-05	1.34E-04	0
36	r_3445	0	4.219E-05	0	0.00E+00	1.14E-04	0
37	r_3446	0	4.624E-05	0	0.00E+00	1.18E-04	0
38	r_3447	0	4.219E-05	0	0.00E+00	1.14E-04	0
39	r_3448	0	4.624E-05	0	0.00E+00	1.18E-04	0
40	r_3449	0	4.22E-05	0	0.00E+00	1.14E-04	0
41	r_3450	0	4.22E-05	0	0.00E+00	1.14E-04	0
42	r_3451	0	4.22E-05	0	0.00E+00	1.14E-04	0
43	r_3452	0	6.12E-05	0	0.00E+00	1.34E-04	0
44	r_3453	0	4.22E-05	0	0.00E+00	1.14E-04	0
45	r_3454	0	4.62E-05	0	0.00E+00	1.18E-04	0
46	r_3455	0	4.22E-05	0	0.00E+00	1.14E-04	0
47	r_3456	0	4.62E-05	0	0.00E+00	1.18E-04	0
48	r_3457	0	4.22E-05	0	0.00E+00	1.14E-04	0
49	r_3458	0	4.22E-05	0	0.00E+00	1.14E-04	0
50	r_3459	0	4.219E-05	0	0.00E+00	1.14E-04	0
51	r_3460	0	6.122E-05	0	0.00E+00	1.34E-04	0
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2	r_3461	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2611
3	r_3462	0.00E+00	4.62E-05	0.00E+00	0.00E+00	1.18E-04	0	r_2612
4	r_3463	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2613
5	r_3464	0	4.624E-05	0	0.00E+00	1.18E-04	0	r_2614
6	r_3465	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2615
7	r_3466	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2616
8	r_3467	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2617
9	r_3468	0	6.122E-05	0	0.00E+00	1.34E-04	0	r_2618
10	r_3469	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2619
11	r_3470	0	4.624E-05	0	0.00E+00	1.18E-04	0	r_2620
12	r_3471	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2621
13	r_3472	0	4.624E-05	0	0.00E+00	1.18E-04	0	r_2622
14	r_3473	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2623
15	r_3474	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2624
16	r_3475	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2625
17	r_3476	0	6.122E-05	0	0.00E+00	1.34E-04	0	r_2626
18	r_3477	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2627
19	r_3478	0	4.624E-05	0	0.00E+00	1.18E-04	0	r_2628
20	r_3479	0.00E+00	4.22E-05	0.00E+00	0.00E+00	1.14E-04	0	r_2629
21	r_3480	0	4.62E-05	0	0.00E+00	1.18E-04	0	r_2630
22	r_3481	0.00E+00	4.22E-05	0.00E+00	0.00E+00	1.14E-04	0	r_2631
23	r_3482	0	4.22E-05	0	0.00E+00	1.14E-04	0	r_2632
24	r_3483	0	4.22E-05	0	0.00E+00	1.14E-04	0	r_2633
25	r_3484	3.33E-05	6.12E-05	0	0.00E+00	1.34E-04	0	r_2634
26	r_3485	0	4.22E-05	0	0.00E+00	1.14E-04	0	r_2635
27	r_3486	0	4.62E-05	0	0.00E+00	1.18E-04	0	r_2636
28	r_3487	0	4.22E-05	0	0.00E+00	1.14E-04	0	r_2637
29	r_3488	0	4.62E-05	0	0.00E+00	1.18E-04	0	r_2638
30	r_3489	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2639
31	r_3490	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2640
32	r_3491	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2641
33	r_3492	0	6.122E-05	0	0.00E+00	1.34E-04	0	r_2642
34	r_3493	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2643
35	r_3494	0	4.624E-05	0	0.00E+00	1.18E-04	0.00E+00	r_2644
36	r_3495	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2645
37	r_3496	0	4.624E-05	0	0.00E+00	1.18E-04	0	r_2646
38	r_3497	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2647
39	r_3498	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2648
40	r_3499	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2649
41	r_3500	0	6.122E-05	0	0	0.000134	0	r_2650
42	r_3501	0	4.219E-05	0	0	0.000114	0	r_2651
43	r_3502	0	4.624E-05	0	0.00E+00	1.18E-04	0	r_2652
44	r_3503	0	4.219E-05	0	0	0.000114	0	r_2653
45	r_3504	0	4.624E-05	0	0	0.000118	0	r_2654
46	r_3505	0	4.219E-05	0	0	0.000114	0	r_2655
47	r_3506	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2656
48	r_3507	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_2657
49	r_1357	0	2.19E-06	0	0.00E+00	7.79E-06	0.00E+00	r_2658
50	r_1358	0	4.25E-06	0	0	1.51E-05	0	r_2659
51	r_1359	3.67E-05	3.67E-05	3.29E-05	3.95E-05	3.95E-05	2.59E-05	r_2660
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2	r_1360	0	0.00E+00	0	0	0	0	r_2661
3	r_1361	0	0.00E+00	0	0	0	0	r_2662
4	r_1362	0	0.00E+00	0	0	0	0	r_2663
5	r_1363	0	0.00E+00	0	0	0	0	r_2664
6	r_1364	0	0.00E+00	0	0	0	0	r_2665
7	r_1365	0	0.00E+00	0	0	0	0	r_2666
8	r_1366	0	0.00E+00	0	0	0	0	r_2667
9	r_1367	0	0.00E+00	0	0	0	0	r_2668
10	r_1368	0	0	0	0	0	0	r_2669
11	r_1369	0	0	0	0	0	0	r_2670
12	r_1370	0	0	0	0.00E+00	0.00E+00	0	r_2671
13	r_1371	0	0	0	0.00E+00	0.00E+00	0	r_2672
14	r_1449	0.00E+00	2.09E-06	0.00E+00	0.00E+00	7.43E-06	0	r_2673
15	r_1450	0.00E+00	1.91E-06	0	0.00E+00	6.80E-06	0	r_2674
16	r_1451	0	1.92E-06	0	0.00E+00	6.85E-06	0	r_2675
17	r_1452	0.00E+00	1.77E-06	0.00E+00	0.00E+00	6.31E-06	0	r_2676
18	r_1453	0	2.28E-06	0	0.00E+00	8.12E-06	0	r_2677
19	r_1454	0	2.07E-06	0	0.00E+00	7.37E-06	0	r_2678
20	r_1455	0	2.09E-06	0	0.00E+00	7.43E-06	0	r_2679
21	r_1456	0	1.91E-06	0	0.00E+00	6.80E-06	0	r_2680
22	r_1457	0	1.79E-06	0	0	6.35E-06	0	r_2681
23	r_1458	0	1.654E-06	0	0	5.89E-06	0	r_2682
24	r_1459	0	0.00E+00	0	0	0	0	r_2683
25	r_1460	0	0	0	0	0	0	r_2684
26	r_1461	0	0.00E+00	0	0	0	0	r_2685
27	r_1462	0	0	0	0	0	0	r_2686
28	r_1463	0	0.00E+00	0	0	0	0	r_2687
29	r_1464	0	0.00E+00	0	0	0	0	r_2688
30	r_1465	0	0.00E+00	0	0	0	0	r_2689
31	r_1466	0.00E+00	0.00E+00	0.00E+00	0	0	0	r_2690
32	r_1467	0	0.00E+00	0	0	0	0	r_2691
33	r_1468	0.00E+00	0.00E+00	0.00E+00	0	0	0	r_2692
34	r_1469	0	0.00E+00	0	0	0	0	r_2693
35	r_1470	0	0.00E+00	0	0	0	0	r_2694
36	r_1471	0	0.00E+00	0	0	0	0	r_2695
37	r_1472	0	0.00E+00	0	0	0	0	r_2696
38	r_1473	0	0.00E+00	0	0	0	0	r_2697
39	r_1474	0	0	0.00E+00	0	0	0	r_2698
40	r_1475	0	0.00E+00	0	0	0	0	r_2699
41	r_1476	0	0.00E+00	0	0	0	0	r_2700
42	r_1477	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_2701
43	r_1478	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_2702
44	r_1479	3.79E-05	3.79E-05	1.33E-05	4.08E-05	4.08E-05	0	r_2703
45	r_1480	0	2.25E-05	0	0.00E+00	3.95E-05	0	r_2704
46	r_1481	0	2.46E-05	0	0.00E+00	4.08E-05	0	r_2705
47	r_1482	0	1.18E-05	0	0.00E+00	3.95E-05	0	r_2706
48	r_1483	0	2.46E-05	0	0.00E+00	4.08E-05	0	r_2707
49	r_1484	0	1.18E-05	0	0.00E+00	3.95E-05	0	r_2708
50	r_1485	0	1.23E-05	0	0.00E+00	4.08E-05	0	r_2709
51	r_1486	0	7.96E-06	0	0.00E+00	2.83E-05	0	r_2710
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2	r_1487	0	8.21E-06	0	0	2.92E-05	0	r_2711
3	r_1488	0	6.02E-06	0	0	2.14E-05	0	r_2712
4	r_1489	0	0.00E+00	0	0	0	0	r_2713
5	r_1490	0	0.00E+00	0	0	0	0	r_2714
6	r_1491	0	0.00E+00	0	0	0	0	r_2715
7	r_1492	0	0.00E+00	0	0	0	0	r_2716
8	r_1493	0.00E+00	0.00E+00	0.00E+00	0	0	0	r_2717
9	r_1494	0	0.00E+00	0	0	0	0.00E+00	r_2718
10	r_1495	0	0.00E+00	0	0	0	0	r_2719
11	r_1496	0	0.00E+00	0	0	0	0	r_2720
12	r_1497	0	0.00E+00	0	0	0	0	r_2721
13	r_1498	0	0.00E+00	0	0	0	0	r_2722
14	r_1499	0	0.00E+00	0	0	0	0	r_2723
15	r_1500	0	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00	r_2724
16	r_1501	0	0.00E+00	0	0	0	0	r_2725
17	r_1502	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_2726
18	r_1503	0	0.00E+00	0	0	0	0	r_2727
19	r_1504	0	0.00E+00	0	0	0	0	r_2728
20	r_1505	0	0.00E+00	0	0	0	0	r_2729
21	r_1506	0	0	0	0.00E+00	0.00E+00	0	r_2730
22	r_1507	0	0	0	0.00E+00	0.00E+00	0	r_2731
23	r_1508	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	r_2732
24	r_1509	0	3.74E-06	0	0.00E+00	1.33E-05	0	r_2733
25	r_1510	0	3.21E-06	0	0.00E+00	1.14E-05	0	r_2734
26	r_1511	0	3.24E-06	0	0.00E+00	1.15E-05	0	r_2735
27	r_1512	0	2.84E-06	0	0.00E+00	1.01E-05	0	r_2736
28	r_1513	0.00E+00	4.41E-06	0.00E+00	0.00E+00	1.57E-05	0	r_2737
29	r_1514	0	3.685E-06	0	0.00E+00	1.31E-05	0	r_2738
30	r_1515	0	3.74E-06	0	0.00E+00	1.33E-05	0	r_2739
31	r_1516	0.00E+00	3.21E-06	0.00E+00	0.00E+00	1.14E-05	0	r_2740
32	r_1517	0	2.867E-06	0	0	1.02E-05	0	r_2741
33	r_1518	0	2.54E-06	0	0	9.05E-06	0	r_2742
34	r_1519	0	0.00E+00	0	0	0	0	r_2743
35	r_1520	0	0	0	0	0	0	r_2744
36	r_1521	0	0	0	0	0	0	r_2745
37	r_1522	0	0	0	0	0	0	r_2746
38	r_1523	0	0	0	0	0	0	r_2747
39	r_1524	0	0	0	0	0	0	r_2748
40	r_1525	0	0	0.00E+00	0	0	0	r_2749
41	r_1526	0	0.00E+00	0	0	0	0	r_2750
42	r_1527	0	0.00E+00	0	0	0	0	r_2751
43	r_1528	0	0	0	0	0	0	r_2752
44	r_1529	0	0.00E+00	0	0	0	0	r_2753
45	r_1530	0	0	0.00E+00	0	0	0	r_2754
46	r_1531	0	0.00E+00	0	0	0	0	r_2755
47	r_1532	0	0.00E+00	0	0	0	0	r_2756
48	r_1533	0	0.00E+00	0	0	0	0	r_2757
49	r_1534	0	0.00E+00	0	0	0	0	r_2758
50	r_1535	0	0.00E+00	0	0	0	0	r_2759
51	r_1536	0	0.00E+00	0	0	0	0	r_2760
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2	r_1537	0	0.00E+00	0	0	0	0	r_2761
3	r_1538	0	0	0	0	0	0	r_2762
4	r_3963	0.000207	2.07E-04	0.000175	0.000223	0.000223	0.000109	r_2763
5	r_3964	0	3.202E-05	0	0.00E+00	1.14E-04	0	r_2764
6	r_3965	0	3.053E-05	0	0	0.000109	0	r_2765
7	r_3966	0	1.56E-05	0	0.00E+00	5.56E-05	0	r_2766
8	r_3967	0	3.053E-05	0.00E+00	0.00E+00	1.09E-04	0	r_2767
9	r_3968	0	1.56E-05	0	0.00E+00	5.56E-05	0	r_2768
10	r_3969	0	1.526E-05	0	0.00E+00	5.43E-05	0	r_2769
11	r_3970	0	1.034E-05	0	0.00E+00	3.68E-05	0	r_2770
12	r_3971	0	7.469E-05	0.00E+00	0.00E+00	8.04E-05	0	r_2771
13	r_3972	7.14E-05	7.14E-05	0	7.69E-05	7.69E-05	0	r_2772
14	r_3974	0	1.33E-05	0	0.00E+00	3.63E-05	0	r_2773
15	r_3975	2.95E-05	2.95E-05	0	3.17E-05	3.17E-05	0	r_2774
16	r_3976	0	2.945E-05	0	0.00E+00	3.17E-05	0	r_2775
17	r_3977	0.00E+00	2.62E-05	0.00E+00	0.00E+00	2.82E-05	0	r_2776
18	r_3978	0	2.06E-05	0	0.00E+00	2.82E-05	0	r_2777
19	r_3979	5.24E-05	5.24E-05	1.42E-05	5.64E-05	5.64E-05	0	r_2778
20	r_3980	0	3.202E-05	0	0.00E+00	5.64E-05	0	r_2779
21	r_3981	0	3.628E-05	0	0.00E+00	5.36E-05	0	r_2780
22	r_3982	0	1.701E-05	0	0.00E+00	5.36E-05	0	r_2781
23	r_3983	0	3.628E-05	0	0.00E+00	5.36E-05	0	r_2782
24	r_3984	0	1.701E-05	0	0.00E+00	5.36E-05	0	r_2783
25	r_3985	0	1.814E-05	0	0	5.1E-05	0	r_2784
26	r_3986	0	1.16E-05	0	0	4.12E-05	0	r_2785
27	r_3988	0.00038	0.0003801	0.000295	0.000409	0.000409	0.000106	r_2786
28	r_3989	0	3.20E-05	0	0.00E+00	1.14E-04	0	r_2787
29	r_3990	0	8.106E-05	0	0	0.000288	0	r_2788
30	r_3991	0	2.30E-05	0	0.00E+00	8.17E-05	0	r_2789
31	r_3992	0	8.11E-05	0	0	0.000288	0	r_2790
32	r_3993	0	2.295E-05	0	0.00E+00	8.17E-05	0	r_2791
33	r_3994	0	4.053E-05	0.00E+00	0	0.000144	0	r_2792
34	r_3995	0	1.79E-05	0	0	6.36E-05	0	r_2793
35	r_3997	9.45E-05	9.447E-05	4.37E-05	1.02E-04	1.02E-04	0	r_2794
36	r_3998	0	3.202E-05	0	0.00E+00	1.02E-04	0	r_2795
37	r_3999	0	4.816E-05	0	0.00E+00	9.65E-05	0	r_2796
38	r_4000	0	1.923E-05	0	0.00E+00	6.84E-05	0	r_2797
39	r_4001	0	4.816E-05	0	0.00E+00	9.65E-05	0	r_2798
40	r_4002	0	1.92E-05	0	0.00E+00	6.84E-05	0	r_2799
41	r_4003	0	2.41E-05	0	0.00E+00	8.57E-05	0	r_2800
42	r_4004	0.00E+00	1.37E-05	0.00E+00	0.00E+00	4.89E-05	0	r_2801
43	r_4006	0.000109	0.0001091	4.50E-05	1.18E-04	1.18E-04	0	r_2802
44	r_4007	0	6.17E-05	0	0.00E+00	1.13E-04	0	r_2803
45	r_4008	0	3.202E-05	0	0.00E+00	1.14E-04	0	r_2804
46	r_4009	0	2.108E-05	0	0.00E+00	7.50E-05	0	r_2805
47	r_4010	0	6.17E-05	0	0.00E+00	1.13E-04	0	r_2806
48	r_4011	0	3.085E-05	0	0.00E+00	1.09E-04	0	r_2807
49	r_4012	0	2.108E-05	0	0	7.5E-05	0	r_2808
50	r_4013	0	1.57E-05	0	0.00E+00	5.59E-05	0	r_2809
51	r_4014	0	3.202E-05	0.00E+00	0.00E+00	1.14E-04	0	r_2810

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2	r_4015	0	2.108E-05	0	0.00E+00	7.50E-05	0		r_2811
3	r_4016	0	1.601E-05	0.00E+00	0.00E+00	5.70E-05	0		r_2820
4	r_4017	0	1.271E-05	0.00E+00	0.00E+00	4.52E-05	0		r_2820
5	r_4018	0	2.108E-05	0.00E+00	0.00E+00	7.50E-05	0		r_2821
6	r_4019	0	1.571E-05	0	0.00E+00	5.59E-05	0		r_2821
7	r_4020	0	1.271E-05	0	0	4.52E-05	0		r_2822
8	r_4021	0	1.05E-05	0	0	3.75E-05	0		r_2822
9	r_4022	0	6.17E-05	0	0.00E+00	1.13E-04	0		r_2823
10	r_4023	0	3.085E-05	0	0.00E+00	1.09E-04	0		r_2823
11	r_4024	0.00E+00	2.11E-05	0.00E+00	0	7.5E-05	0		r_2824
12	r_4025	0	1.571E-05	0	0.00E+00	5.59E-05	0		r_2824
13	r_4026	0.00E+00	3.08E-05	0.00E+00	0.00E+00	1.09E-04	0		r_2825
14	r_4027	0	2.06E-05	0.00E+00	0.00E+00	7.32E-05	0		r_2825
15	r_4028	0	1.57E-05	0	0.00E+00	5.59E-05	0		r_2826
16	r_4029	0	1.25E-05	0	0.00E+00	4.46E-05	0		r_2826
17	r_4030	0	2.108E-05	0	0.00E+00	7.50E-05	0		r_2827
18	r_4031	0	1.571E-05	0	0.00E+00	5.59E-05	0		r_2827
19	r_4032	0	1.271E-05	0	0.00E+00	4.52E-05	0		r_2828
20	r_4033	0	1.054E-05	0	0.00E+00	3.75E-05	0		r_2829
21	r_4034	0	1.571E-05	0	0.00E+00	5.59E-05	0		r_2830
22	r_4035	0	1.252E-05	0	0.00E+00	4.46E-05	0		r_2831
23	r_4036	0	1.054E-05	0	0.00E+00	3.75E-05	0		r_2832
24	r_4037	0	9.001E-06	0	0.00E+00	3.20E-05	0		r_2833
25	r_1542	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_2834
26	r_1543	0.09984	9.98E-02	0.09984	1.08E-01	1.08E-01	0.107529		r_2835
27	r_1545	0	0	0	0.00E+00	0.00E+00	0		r_2836
28	r_1546	0.00E+00	3.78E-06	0.00E+00	0.00E+00	1.35E-05	0		r_2836
29	r_1547	0	1.762E-06	0.00E+00	0.00E+00	6.27E-06	0		r_2837
30	r_1548	0	9.334E-07	0.00E+00	0.00E+00	3.32E-06	0		r_2837
31	r_1549	0.00E+00	2.41E-06	0.00E+00	0	8.59E-06	0		r_2838
32	r_1550	0	1.685E-06	0.00E+00	0.00E+00	6.00E-06	0		r_2838
33	r_1551	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		r_2839
34	r_1552	0	4.105E-06	0	0	1.46E-05	0		r_2839
35	r_1553	0	1.141E-06	0	0.00E+00	4.06E-06	0		r_2840
36	r_1554	0.00E+00	0.00E+00	0.00E+00	0	0	0		r_2840
37	r_1560	0	2.401E-05	0	0	8.54E-05	0		r_2841
38	r_1562	3.33E-05	6.122E-05	0.00E+00	3.59E-05	0.000134	0		r_2841
39	r_1563	0	0.00E+00	0	0	0	0		r_2842
40	r_1564	0	0	0.00E+00	0	0	0.00E+00		r_2842
41	r_1565	0	0.00E+00	0.00E+00	0	0	0		r_2843
42	r_1566	0	0.00E+00	0	0	0	0.00E+00		r_2843
43	r_1567	-3.84E-02	-3.82E-02	-3.84E-02	-2.50E-02	-2.44E-02	-0.02505		r_2844
44	r_1568	0	0	-9.3E-07	0.00E+00	0.00E+00	-3.3E-06		r_2845
45	r_1572	0	1.697E-06	0.00E+00	0	6.04E-06	0		r_2846
46	r_1573	0.00E+00	1.70E-06	0.00E+00	0.00E+00	6.04E-06	0		r_2847
47	r_1574	-0.02608	-0.026032	-0.02608	-2.81E-02	-2.79E-02	-2.81E-02		r_2848
48	r_1575	0.00E+00	1.60E-06	0.00E+00	0.00E+00	5.70E-06	0.00E+00		r_2849
49	r_1576	0	0	-1.6E-06	0.00E+00	0.00E+00	-5.7E-06		r_2850
50	r_1577	0	1.69E-06	0	0.00E+00	6.00E-06	0		r_2851
51	r_1578	0.00E+00	1.69E-06	0.00E+00	0.00E+00	6.00E-06	0		r_2852
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2	r_1579	0	1.601E-06	0	0.00E+00	5.70E-06	0	r_2852
3	r_1580	0	1.60E-06	0	0.00E+00	5.70E-06	0	r_2853
4	r_1581	0.00E+00	1.23E-06	0.00E+00	0.00E+00	4.38E-06	0	r_2853
5	r_1582	0	2.36E-06	0	0.00E+00	8.40E-06	0	r_2854
6	r_1583	0	2.198E-06	0	0.00E+00	7.82E-06	0	r_2854
7	r_1585	0.016954	0.0169554	0.000533	0.01826	0.018265	0.000454	r_2855
8	r_1586	0	2.965E-06	0	0	1.05E-05	0	r_2855
9	r_1587	0	0	0	0.00E+00	0.00E+00	0	r_2856
10	r_1588	0	1000	-1000	0	1000	-1.00E+03	r_2856
11	r_1589	0	1.166E-06	0	0.00E+00	4.15E-06	0	r_2857
12	r_1590	0	0	-1.2E-06	0	0	-4.1E-06	r_2857
13	r_1591	0	1.166E-06	0.00E+00	0	4.15E-06	0	r_2858
14	r_1595	0.026077	0.0260791	0.025885	0.028086	0.028092	2.74E-02	r_2858
15	r_1596	-0.01695	1000	-0.01696	-1.83E-02	1.00E+03	-0.01827	r_2859
16	r_1597	0	0	-1.7E-06	0.00E+00	0.00E+00	-6E-06	r_2859
17	r_1598	0	1.809E-06	0	0.00E+00	6.44E-06	0	r_2860
18	r_1599	0.00E+00	1.81E-06	0.00E+00	0	6.44E-06	0	r_2861
19	r_1600	0	1.712E-06	0	0	6.09E-06	0	r_2862
20	r_1601	0	0	0	0.00E+00	0.00E+00	0	r_2863
21	r_1603	0	0	0	0.00E+00	0.00E+00	0	r_2864
22	r_1604	0	1.52E-06	0	0	5.43E-06	0	r_2865
23	r_1605	0	1.525E-06	0	0	5.43E-06	0	r_2866
24	r_1606	0	0.00E+00	0	0	0	0	r_2867
25	r_1607	0	0	0	0	0	0	r_2868
26	r_1608	0	0	0	0	0	0	r_2869
27	r_1609	0	0.00E+00	0	0	0	0	r_2870
28	r_1610	0	0	0	0	0	0	r_2871
29	r_1611	0	0	0	0	0	0	r_2872
30	r_1613	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_2873
31	r_1614	0	0	0	0	0	0	r_2874
32	r_1615	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_2875
33	r_1616	0	0	0	0.00E+00	0.00E+00	0	r_2876
34	r_1617	0	4.80E-05	0	0.00E+00	1.71E-04	0	r_2877
35	r_1618	0	4.803E-05	0	0.00E+00	1.71E-04	0.00E+00	r_2878
36	r_1620	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_2879
37	r_1622	-7E-07	-7.04E-07	-7E-07	-7.58E-07	-7.58E-07	-7.6E-07	r_2880
38	r_1623	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_2881
39	r_1624	0	0	0	0.00E+00	0.00E+00	0	r_2882
40	r_1625	0	0	0	0.00E+00	0.00E+00	0	r_2883
41	r_1627	0	0	0	0.00E+00	0.00E+00	0	r_2884
42	r_1628	0	0	0	0.00E+00	0.00E+00	0	r_2885
43	r_1629	0	0	0	0.00E+00	0.00E+00	0	r_2886
44	r_1630	0	2.218E-06	0.00E+00	0.00E+00	7.89E-06	0.00E+00	r_2887
45	r_1631	0	5.22E-06	0	0.00E+00	1.86E-05	0	r_2888
46	r_1632	0.00E+00	0.00E+00	-1.00E+03	-8.68E-01	0.00E+00	-1000	r_2889
47	r_1633	0	0	-5.22E-06	0.00E+00	0.00E+00	-1.9E-05	r_2890
48	r_1634	0	6.624E-06	0.00E+00	0.00E+00	2.36E-05	0	r_2891
49	r_1635	0	0.00E+00	0	0	0	0	r_2892
50	r_1637	0	0.00E+00	0	0	0	0	r_2893
51	r_1638	0	1.241E-05	0	0.00E+00	4.34E-05	0	r_2894

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2	r_1639	0	0.00E+00	0	0	0	0.00E+00		r_2895
3	r_1640	0	0	0	0.00E+00	0.00E+00	0		r_2896
4	r_1641	0	1.134E-06	0.00E+00	0	4.04E-06	0		r_2897
5	r_1642	0	0	-1.5E-05	0.00E+00	0.00E+00	-5.3E-05		r_2898
6	r_1643	0	0.00E+00	0	0	0	0.00E+00		r_2899
7	r_1644	0	0.00E+00	-4.8E-05	0	0	-0.00017		r_2900
8	r_1645	0	0	-4.8E-05	0.00E+00	0.00E+00	-0.00017		r_2901
9	r_1647	0	0	-1E-05	0.00E+00	0.00E+00	-3.5E-05		r_2902
10	r_1648	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_2903
11	r_1649	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_2904
12	r_1650	0.00E+00	9.69E-07	0.00E+00	0.00E+00	3.45E-06	0		r_2905
13	r_1651	0	1.891E-06	0.00E+00	0.00E+00	6.73E-06	0		r_2906
14	r_1652	0	1.00E+03	-1.00E+03	0	1000	-1000		r_2907
15	r_1654	-5.98E-01	-5.98E-01	-5.98E-01	-5.30E-01	-5.30E-01	-5.30E-01		r_2908
16	r_1656	0	0.00E+00	0.00E+00	0	0	0		r_2909
17	r_1658	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		r_2910
18	r_1659	0	3.007E-06	-9.97E-06	0	1.07E-05	-3.5E-05		r_2911
19	r_1660	0	4.80E-05	0	0	0.000171	0		r_2912
20	r_1661	0	4.803E-05	0	0.00E+00	1.71E-04	0		r_2913
21	r_1663	0	1.9638127	0	0.00E+00	2.00E+00	0		r_2914
22	r_1664	0	0	0	0	0	0		r_2915
23	r_1665	0	1.00E+03	-1000	0.00E+00	1.00E+03	-1000		r_2916
24	r_1667	0.21064	1000	-1000	2.27E-01	1.00E+03	-1000		r_2917
25	r_1668	0	1.9638127	0.00E+00	0.00E+00	2.00E+00	0		r_2918
26	r_1669	0	1000	-1.00E+03	0.00E+00	1.00E+03	-1000		r_2919
27	r_1671	0	0	0	0.00E+00	0.00E+00	0		r_2920
28	r_1672	1.963804	1.96E+00	0	1.99E+00	2.00E+00	0		r_2921
29	r_1673	0	1.241E-05	0	0.00E+00	4.34E-05	0		r_2922
30	r_1674	0.00E+00	1.24E-05	0.00E+00	0	4.34E-05	0		r_2923
31	r_1675	0	0	0	0	0	0		r_2924
32	r_1676	-3.79E-05	-1.33E-05	-9.91E-05	-4.08E-05	0.00E+00	-0.00017		r_2925
33	r_1677	0.00E+00	0.00E+00	-6.12E-05	0.00E+00	0.00E+00	-0.00013		r_2926
34	r_1678	0	0	-6.1E-05	0	0	-0.00013		r_2927
35	r_1679	0.00E+00	0.00E+00	-6.12E-05	0.00E+00	0.00E+00	-0.00013		r_2928
36	r_1680	0	0.00E+00	-6.1E-05	0.00E+00	0.00E+00	-0.00013		r_2929
37	r_1681	0	0	-6.1E-05	0.00E+00	0.00E+00	-0.00013		r_2930
38	r_1682	0.000575	5.78E-04	0.000563	6.19E-04	6.24E-04	0.000576		r_2931
39	r_1683	0	0	0	0.00E+00	0.00E+00	0.00E+00		r_2932
40	r_1684	0	4.219E-05	0	0.00E+00	1.14E-04	0.00E+00		r_2933
41	r_1685	0	0	0	0.00E+00	0.00E+00	0.00E+00		r_2934
42	r_1686	0	0	-2.6E-06	0.00E+00	0.00E+00	-9.42E-06		r_2935
43	r_1687	0	2.65E-06	0	0.00E+00	9.42E-06	0		r_2936
44	r_1688	0	0.00E+00	-3E-06	0.00E+00	0.00E+00	-1.07E-05		r_2937
45	r_1689	0	1.33E-05	-2.9E-06	0.00E+00	4.61E-05	-1E-05		r_2938
46	r_1690	0	1.28E-05	0	0	4.56E-05	0.00E+00		r_2939
47	r_1691	-3.8E-05	-3.72E-05	-3.8E-05	-4.1E-05	-4E-05	-4.2E-05		r_2940
48	r_1694	0	1000	-1000	0	1000	-1000		r_2941
49	r_1695	0	0.00E+00	-3E-06	0.00E+00	0.00E+00	-1.1E-05		r_2942
50	r_1696	-0.93273	-0.932543	-0.93293	-9.73E-01	-9.72E-01	-0.97353		r_2943
51	r_1697	1.963804	1.9638127	1.963781	1.99E+00	2.00E+00	1.994901		r_2944
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2	r_1698	-3.8E-05	-3.72E-05	-6.5E-05	-4.08E-05	-3.95E-05	-1.38E-04		r_2945
3	r_1699	0	0	0	0.00E+00	0.00E+00	0		r_2946
4	r_1700	0	1.746E-05	0	0	6.21E-05	0		r_2947
5	r_1701	3.67E-05	3.67E-05	3.67E-05	3.95E-05	3.95E-05	3.95E-05		r_2948
6	r_1702	0	0	0	0.00E+00	0.00E+00	0		r_2949
7	r_1703	0	4.80E-05	0.00E+00	0	0.000171	0		r_2950
8	r_1704	-0.00053	-0.000429	-0.00053	-5.67E-04	-3.04E-04	-0.00057		r_2951
9	r_1705	0	0	0	0	0	0		r_2952
10	r_1706	0	0.00E+00	0	0	0	0		r_2953
11	r_1707	0	0	0	0	0	0		r_2954
12	r_1708	0.038377	0.0383784	3.82E-02	0.025044	0.025049	0.02436		r_2955
13	r_1709	0	0	0.00E+00	0	0	0		r_2956
14	r_1710	0	0	0	0	0	0.00E+00		r_2957
15	r_1711	0	0	0	0	0	0.00E+00		r_2958
16	r_1712	0	0	0	0.00E+00	0.00E+00	0		r_2959
17	r_1713	0	0.00E+00	-1.9E-06	0.00E+00	0.00E+00	-6.7E-06		r_2960
18	r_1714	-1	-0.999998	-1.00E+00	-1	-0.99999	-1		r_2961
19	r_1715	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_2962
20	r_1716	0	0.00E+00	0	0	0	0.00E+00		r_2963
21	r_1717	0	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00		r_2964
22	r_1718	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		r_2965
23	r_1719	0	0	0	0.00E+00	0.00E+00	0		r_2966
24	r_1720	0	0	0	0.00E+00	0.00E+00	0		r_2967
25	r_1721	0	0	0.00E+00	0.00E+00	0.00E+00	0		r_2968
26	r_1722	0.00E+00	1.39E-05	0.00E+00	0.00E+00	4.95E-05	0		r_2969
27	r_1723	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_2970
28	r_1724	0	1.96E-05	0	0.00E+00	6.98E-05	0		r_2971
29	r_1725	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_2972
30	r_1726	0	0.00E+00	0	0	0	0		r_2973
31	r_1727	0	6.30E-07	0	0	2.24E-06	0		r_2974
32	r_1728	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_2975
33	r_1729	-0.00032	-3.17E-04	-0.00032	-0.00034	-0.00034	-3.41E-04		r_2976
34	r_1730	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_2977
35	r_1731	0	0.00E+00	0	0	0	0		r_2978
36	r_1732	0	0.00E+00	0	0	0	0		r_2979
37	r_1733	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00		r_2980
38	r_1734	0	4.80E-05	0	0.00E+00	1.71E-04	0		r_2981
39	r_1735	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		r_2982
40	r_1736	0	1.478E-05	0.00E+00	0.00E+00	5.26E-05	0		r_2983
41	r_1737	0	0.00E+00	0	0	0	0		r_2984
42	r_1738	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_2985
43	r_1739	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_2986
44	r_1743	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_2987
45	r_1744	0	0	0.00E+00	0	0	0.00E+00		r_2988
46	r_1745	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		r_2989
47	r_1746	-0.00084	3.810178	-0.00093	0.00E+00	3.86E+00	-0.00122		r_2990
48	r_1747	0	0	-2.7E-05	0	0	-9.77E-05		r_2991
49	r_1748	-0.07108	-7.11E-02	-0.07108	-0.07655	-0.07655	-7.66E-02		r_2992
50	r_1749	0	1.001E-06	0	0.00E+00	3.56E-06	0		r_2993
51	r_1750	0	0	-1E-06	0.00E+00	0.00E+00	-3.6E-06		r_2994

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2	r_1751	0	0	-2.7E-05	0	0	-9.8E-05	r_2995
3	r_1752	0	2.744E-05	0	0.00E+00	9.77E-05	0	r_2996
4	r_1753	0	2.32E-07	0	0	8.26E-07	0	r_2997
5	r_1754	0.000564	5.67E-04	0.000564	0.000608	0.000612	6.08E-04	r_2998
6	r_1757	0	2.30E-07	0	0	8.18E-07	0	r_2999
7	r_1758	0.000564	1.00E+03	-1000	6.08E-04	1.00E+03	-1000	r_3000
8	r_1759	0	0.00E+00	-2.7E-05	0.00E+00	0.00E+00	-9.8E-05	r_3001
9	r_1760	0	1.00E+03	-1000	0.00E+00	1.00E+03	-1.00E+03	r_3002
10	r_1761	0	4.488E-06	0	0	1.6E-05	0	r_3003
11	r_1762	0	4.488E-06	0	0.00E+00	1.60E-05	0.00E+00	r_3004
12	r_1763	0	0	-1000	-8.68E-01	0.00E+00	-1.00E+03	r_3005
13	r_1764	0	0	0	0	0	0.00E+00	r_3006
14	r_1765	0	2.44E-06	0	0	8.67E-06	0.00E+00	r_3007
15	r_1766	8.8E-08	8.798E-08	8.8E-08	9.48E-08	9.48E-08	9.48E-08	r_3008
16	r_1770	0.00E+00	0.00E+00	-6.30E-07	0.00E+00	0.00E+00	-2.24E-06	r_3009
17	r_1771	0	0	-1.7E-05	0.00E+00	0.00E+00	-6.21E-05	r_3010
18	r_1772	0	1.08E-05	-1.7E-05	0	3.84E-05	-6.21E-05	r_3011
19	r_1774	0	1.327E-05	-1.75E-05	0	4.52E-05	-6.21E-05	r_3022
20	r_1775	0	1.43E-06	-1.7E-05	0.00E+00	5.07E-06	-6.2E-05	r_3023
21	r_1776	0	0.00E+00	-7.2E-07	0	0	-2.6E-06	r_3024
22	r_1777	0	0	-5E-07	0	0	-1.8E-06	r_3025
23	r_1788	0	2.32E-07	0	0.00E+00	8.26E-07	0	r_3026
24	r_1790	0	0.00E+00	0	0	0	0	r_3027
25	r_1791	0	0	0	0	0	0	r_3028
26	r_1792	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3029
27	r_1793	0	3.20E-05	0	0	0.000114	0.00E+00	r_3030
28	r_1794	0	9.61E-05	0	0	0.000342	0	r_3031
29	r_1795	0	0.00E+00	-3.2E-05	0.00E+00	0.00E+00	-0.00011	r_3032
30	r_1796	0	0.00E+00	-4.1E-06	0	0	-1.5E-05	r_3033
31	r_1797	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	r_3034
32	r_1798	0	4.105E-06	0	0	1.46E-05	0	r_3035
33	r_1800	0	0	0	0.00E+00	0.00E+00	0.00E+00	r_3036
34	r_1801	3.79E-05	3.84E-05	3.61E-05	4.08E-05	4.24E-05	3.43E-05	r_3037
35	r_1802	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3038
36	r_1803	3.79E-05	3.84E-05	3.61E-05	4.08E-05	4.24E-05	3.43E-05	r_3039
37	r_1805	0	0.00E+00	-3.5E-05	0.00E+00	0.00E+00	-0.00012	r_3040
38	r_1806	0	0.00E+00	0	0	0	0	r_3041
39	r_1807	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3042
40	r_1808	0	3.38E-06	0	0.00E+00	1.20E-05	0.00E+00	r_3043
41	r_1809	-0.00084	3.810178	-0.00093	0	3.863538	-0.00122	r_3044
42	r_1810	0	7.746E-06	0	0	2.76E-05	0	r_3045
43	r_1811	1.136965	1.1370377	1.136781	1.161054	1.161309	1.160397	r_3046
44	r_1812	0	0	0	0.00E+00	0.00E+00	0.00E+00	r_3046
45	r_1813	0	0	0	0.00E+00	0.00E+00	0	r_3047
46	r_1814	0	0	0	0.00E+00	0.00E+00	0	r_3047
47	r_1815	0	9.702E-06	0	0.00E+00	3.45E-05	0	r_3048
48	r_1816	0	9.702E-06	0	0	3.45E-05	0	r_3048
49	r_1817	0	9.966E-06	0	0	3.55E-05	0	r_3049
50	r_1818	0	2.218E-06	0	0	7.89E-06	0	r_3049
51	r_1819	0	0	0	0.00E+00	0.00E+00	0	r_3050
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2	r_1820	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3050
3	r_1821	0	4.803E-05	0	0	0.000171	0	r_3051
4	r_1822	0	0	0	0	0	0	r_3051
5	r_1823	0	0	0	0	0	0	r_3052
6	r_1824	-0.34858	1.00E+03	-1000	-2.94E-01	1.00E+03	-1.00E+03	r_3052
7	r_1825	-0.06984	-0.069812	-0.06988	-0.07522	-0.07513	-0.07539	r_3053
8	r_1826	0	0	-9.6E-05	0.00E+00	0.00E+00	-3.42E-04	r_3053
9	r_1827	0	4.607E-05	-2.7E-05	0	0.000164	-9.8E-05	r_3054
10	r_1829	0	1000	-1000	0	1000	-1000	r_3054
11	r_1830	0	2.873E-06	-1.7E-05	0.00E+00	1.02E-05	-6.2E-05	r_3055
12	r_1831	0	1000	-9.6E-05	0	1000	-0.00034	r_3055
13	r_1832	0.23337	2.1973219	0.233262	0.218767	2.21385	2.18E-01	r_3056
14	r_1833	0	2.744E-05	0	0	9.77E-05	0.00E+00	r_3056
15	r_1834	0	0	0	0.00E+00	0.00E+00	0	r_3057
16	r_1835	0	0	-4.6E-07	0	0	-1.63E-06	r_3057
17	r_1836	0	0	-4.5E-07	0.00E+00	0.00E+00	-1.61E-06	r_3058
18	r_1837	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3058
19	r_1839	0	0	0	0.00E+00	0.00E+00	0.00E+00	r_3059
20	r_1840	-0.00362	-0.003603	-0.00364	-3.89E-03	-3.85E-03	-0.00392	r_3059
21	r_1841	0	2.354E-06	0	0.00E+00	8.38E-06	0.00E+00	r_3060
22	r_1842	0	0	-2.4E-06	0.00E+00	0.00E+00	-8.4E-06	r_3060
23	r_1843	0	9.653E-07	0	0	3.44E-06	0	r_3061
24	r_1844	0	9.371E-07	0	0.00E+00	3.33E-06	0	r_3061
25	r_1845	0	9.653E-07	0	0	3.44E-06	0	r_3062
26	r_1846	0	0	0	0.00E+00	0.00E+00	0.00E+00	r_3062
27	r_1847	0	0	0	0.00E+00	0.00E+00	0.00E+00	r_3063
28	r_1848	0	0.00E+00	0	0	0	0	r_3063
29	r_1849	0	0.00E+00	-2.4E-05	0.00E+00	0.00E+00	-8.5E-05	r_3064
30	r_1850	0.00E+00	4.80E-05	0.00E+00	0	0.000171	0	r_3064
31	r_1851	0	6.122E-05	0	0	0.000134	0	r_3065
32	r_1852	0	6.122E-05	0	0	0.000134	0	r_3065
33	r_1853	0	6.122E-05	0	3.59E-05	0.000134	0	r_3066
34	r_1854	0	6.12E-05	0	0	0.000134	0	r_3066
35	r_1855	0	6.122E-05	0.00E+00	0	0.000134	0	r_3067
36	r_1856	0	6.12E-05	0	0	0.000134	0	r_3067
37	r_1857	0	6.12E-05	0	0	0.000134	0	r_3068
38	r_1858	0	6.12E-05	0	0.00E+00	1.34E-04	0.00E+00	r_3068
39	r_1859	3.33E-05	6.12E-05	0	0.00E+00	1.34E-04	0.00E+00	r_3069
40	r_1860	0	6.122E-05	0	0.00E+00	1.34E-04	0	r_3069
41	r_1861	-8.8E-08	0.0001066	-8.80E-08	-9.5E-08	-9.5E-08	-9.48E-08	r_3070
42	r_1862	0	1.296E-06	0	0.00E+00	4.61E-06	0	r_3071
43	r_1863	0.00E+00	1.71E-06	0.00E+00	0.00E+00	6.09E-06	0	r_3072
44	r_1864	0	0.00E+00	-1.7E-06	0.00E+00	0.00E+00	-6.1E-06	r_3073
45	r_1865	0.00E+00	1.71E-06	0.00E+00	0.00E+00	6.09E-06	0	r_3074
46	r_1866	0	2.198E-06	0.00E+00	0	7.82E-06	0.00E+00	r_3075
47	r_1867	0	1.557E-06	0	0.00E+00	5.54E-06	0	r_3076
48	r_1868	0.00E+00	2.20E-06	0.00E+00	0.00E+00	7.82E-06	0	r_3077
49	r_1869	0	0	-2.2E-06	0	0	-7.8E-06	r_3078
50	r_1870	0.00E+00	2.36E-06	0.00E+00	0.00E+00	8.40E-06	0	r_3079
51	r_1871	0	1.00E+03	0	0	1000	0	r_3080

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2	r_1872	0	0.00E+00	0	0	0	0	r_3081
3	r_1873	0	4.31E-06	0	0.00E+00	1.53E-05	0	r_3082
4	r_1874	0	0.0001921	0	0	0.000684	0	r_3083
5	r_1875	0	0	0	0	0	0	r_3084
6	r_1876	0	0	0	0.00E+00	0.00E+00	0	r_3085
7	r_1877	0	0	0	0.00E+00	0.00E+00	0	r_3086
8	r_1878	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3087
9	r_1879	0	1.715E-06	0	0	6.1E-06	0	r_3088
10	r_1880	0	3.22E-06	0	0.00E+00	1.15E-05	0	r_3089
11	r_1881	0	3.953E-06	0	0	1.41E-05	0	r_3090
12	r_1882	0	3.69E-05	0	0.00E+00	1.31E-04	0	r_3091
13	r_1883	0	1.36E-07	0	0	8.06E-06	0.00E+00	r_3092
14	r_1884	0	0	0	0	0	0	r_3093
15	r_1885	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	r_3094
16	r_1886	0	0.00E+00	0.00E+00	0	0	0	r_3095
17	r_1887	0.01449	0.0145194	0.01449	1.56E-02	1.57E-02	0.015606	r_3096
18	r_1888	0.00E+00	2.65E-06	0.00E+00	0	9.42E-06	0	r_3097
19	r_1889	0	0	0	0.00E+00	0.00E+00	0.00E+00	r_3098
20	r_1890	0	2.51E-06	0	0	8.92E-06	0.00E+00	r_3099
21	r_1891	0	0	0	0.00E+00	0.00E+00	0	r_3100
22	r_1892	0	1.721E-06	0	0.00E+00	6.13E-06	0	r_3101
23	r_1893	0	0	-2.9E-06	0	0	-1.03E-05	r_3102
24	r_1895	0	2.893E-06	0	0.00E+00	1.03E-05	0.00E+00	r_3103
25	r_1896	0	1.577E-06	0	0.00E+00	5.61E-06	0	r_3104
26	r_1897	0	1000	0	0.00E+00	1.00E+03	0	r_3105
27	r_1898	0	1.685E-06	0	0.00E+00	6.00E-06	0	r_3106
28	r_1899	0	1.564E-06	0	0.00E+00	5.57E-06	0	r_3107
29	r_1900	0	1.00E+03	-1000	0.00E+00	1.00E+03	-1000	r_3108
30	r_1901	0	1.31E-07	0	0	4.95E-06	0.00E+00	r_3109
31	r_1902	0	1.153E-06	0	0.00E+00	4.10E-06	0	r_3110
32	r_1903	0	2.11E-06	0	0.00E+00	7.50E-06	0.00E+00	r_3111
33	r_1904	0	2.91E-05	0	0.00E+00	1.04E-04	0	r_3112
34	r_1905	0	4.509E-06	0	0	1.6E-05	0.00E+00	r_3112
35	r_1906	3.79E-05	3.837E-05	3.72E-05	4.08E-05	4.25E-05	3.95E-05	r_3113
36	r_1907	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3113
37	r_1908	0	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00	r_3114
38	r_1909	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	r_3114
39	r_1910	0	2.729E-06	0	0.00E+00	9.71E-06	0.00E+00	r_3115
40	r_1911	0	9.289E-07	0	0.00E+00	3.31E-06	0.00E+00	r_3115
41	r_1912	0	1.21E-06	0	0.00E+00	4.30E-06	0.00E+00	r_3116
42	r_1913	0	2.154E-06	0	0.00E+00	7.66E-06	0.00E+00	r_3116
43	r_1914	0	2.68E-07	0	0	9.53E-07	0.00E+00	r_3117
44	r_1915	0	5.61E-07	0	0	2E-06	0.00E+00	r_3117
45	r_1916	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3118
46	r_1919	0	0	0	0	0	0	r_3118
47	r_1920	0	0	0	0	0	0	r_3119
48	r_1921	0	0	0	0	0	0	r_3119
49	r_1922	0	0	0	0.00E+00	0.00E+00	0	r_3120
50	r_1923	0	0	0	0	0	0	r_3120
51	r_1924	0	0	0	0.00E+00	0.00E+00	0	r_3120
52	r_1925	0	0	0	0.00E+00	0.00E+00	0	r_3120

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2	r_1926	0	0	0	0.00E+00	0.00E+00	0.00E+00	r_3121
3	r_1927	0	0	0	0.00E+00	0.00E+00	0	r_3121
4	r_1928	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3121
5	r_1929	0	0	0	0	0	0	r_3122
6	r_1930	0	2.65E-05	0	0.00E+00	9.10E-05	0.00E+00	r_3122
7	r_1931	0	0	0	0.00E+00	0.00E+00	0	r_3122
8	r_1932	-0.07108	-7.11E-02	-0.07108	-7.66E-02	-7.66E-02	-7.66E-02	r_3123
9	r_1935	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3123
10	r_1936	0	1.921E-05	0.00E+00	0	6.84E-05	0	r_3123
11	r_1937	0	0	0	0.00E+00	0.00E+00	0	r_3124
12	r_1938	0	0	0	0.00E+00	0.00E+00	0	r_3124
13	r_1939	0	0	0	0	0	0	r_3124
14	r_1940	0	0	0	0.00E+00	0.00E+00	0	r_3125
15	r_1941	0	0.00E+00	0	0	0	0	r_3125
16	r_1942	0	0	0	0	0	0	r_3125
17	r_1943	0	0	0	0	0	0	r_3126
18	r_1944	0	0	0	0	0	0	r_3126
19	r_1945	0	0	0	0.00E+00	0.00E+00	0	r_3126
20	r_1946	0	0	0	0.00E+00	0.00E+00	0	r_3127
21	r_1947	0	0	0	0.00E+00	0.00E+00	0	r_3127
22	r_1952	0	5.56E-07	0.00E+00	0.00E+00	1.98E-06	0	r_3127
23	r_1963	-0.0012	-1.20E-03	-0.00123	-0.0013	-0.0013	-0.00139	r_3128
24	r_1964	0.001205	0.0012293	0.001204	0.001297	0.001385	0.001296	r_3129
25	r_1965	-0.56848	-0.56839	-5.85E-01	-0.58053	-0.5802	-0.59835	r_3130
26	r_1966	0	0	0	0.00E+00	0.00E+00	0	r_3131
27	r_1967	0	0	0	0.00E+00	0.00E+00	0	r_3132
28	r_1968	0	0	0	0.00E+00	0.00E+00	0	r_3133
29	r_1970	0	0	0	0.00E+00	0.00E+00	0.00E+00	r_3134
30	r_1971	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3135
31	r_1972	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	r_3136
32	r_1974	0	4.803E-05	0	0	0.000171	0	r_3137
33	r_1975	0	4.803E-05	0	0.00E+00	1.71E-04	0.00E+00	r_3138
34	r_1976	0	3.694E-05	0	0.00E+00	1.31E-04	0	r_3139
35	r_1977	0.000603	0.0006273	0.000603	6.49E-04	7.37E-04	0.000649	r_3140
36	r_1978	1.909946	1.9099541	1.909927	1.94E+00	1.94E+00	1.94E+00	r_3141
37	r_1979	1.962779	1.9628075	1.962771	1.95E+00	1.95E+00	1.944987	r_3142
38	r_1980	0	8.62E-06	0	0.00E+00	3.07E-05	0.00E+00	r_3143
39	r_1981	0	0	-4.05E-07	0.00E+00	0.00E+00	-1.44E-06	r_3144
40	r_1984	0	7.19E-07	0	0.00E+00	2.56E-06	0	r_3144
41	r_1987	0	2.106E-06	0.00E+00	0.00E+00	7.50E-06	0	r_3145
42	r_1988	0	4.708E-06	0.00E+00	0	1.68E-05	0.00E+00	r_3145
43	r_1989	0	4.708E-06	0.00E+00	0.00E+00	1.68E-05	0	r_3146
44	r_1990	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	r_3146
45	r_1991	0	0.00E+00	-8.6E-06	0.00E+00	0.00E+00	-3.1E-05	r_3147
46	r_1992	-1.96278	-1.96E+00	-1.96281	-1.95E+00	-1.94E+00	-1.95E+00	r_3147
47	r_1993	0	4.59E-07	0	0.00E+00	1.63E-06	0.00E+00	r_3148
48	r_1994	0	4.529E-07	0.00E+00	0	1.61E-06	0	r_3148
49	r_1995	3.79E-05	3.837E-05	3.72E-05	4.08E-05	4.25E-05	3.95E-05	r_3149
50	r_1996	0	0	-1.48E-05	0	0	-5.3E-05	r_3149
51	r_1997	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	r_3150
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2	r_1998	0	0	-1.13E-06	0.00E+00	0.00E+00	-4.04E-06		r_3150
3	r_1999	0	0	0.00E+00	0.00E+00	0.00E+00	0		r_3151
4	r_2000	0	9.57E-07	0.00E+00	0.00E+00	3.40E-06	0		r_3151
5	r_2001	0	1.21E-06	0	0	4.3E-06	0		r_3152
6	r_2002	0	1.21E-06	0	0	4.3E-06	0		r_3152
7	r_2003	0	1.166E-06	0	0	4.15E-06	0		r_3153
8	r_2004	0	0	0	0	0	0		r_3153
9	r_2005	-0.11521	-0.115205	-0.11521	-7.52E-02	-7.52E-02	-7.52E-02		r_3154
10	r_2008	0	0	0	0	0	0		r_3154
11	r_2020	0	0	0	0.00E+00	0.00E+00	0		r_3155
12	r_2022	8.8E-08	8.798E-08	8.8E-08	9.48E-08	9.48E-08	9.48E-08		r_3155
13	r_2023	0	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00		r_3156
14	r_2024	0	2.11E-06	0	0.00E+00	7.50E-06	0		r_3156
15	r_2025	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_3157
16	r_2026	0	4.80E-05	0	0.00E+00	1.71E-04	0.00E+00		r_3157
17	r_2027	0	4.80E-05	0	0.00E+00	1.71E-04	0		r_3158
18	r_2028	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_3158
19	r_2030	8.71E-05	8.71E-05	8.71E-05	9.38E-05	9.38E-05	9.38E-05		r_3159
20	r_2031	0	2.74E-05	-4.8E-05	0.00E+00	9.77E-05	-0.00017		r_3159
21	r_2032	0.830825	8.31E-01	0.830632	8.13E-01	8.14E-01	8.13E-01		r_3160
22	r_2033	0	5.22E-06	0	0.00E+00	1.86E-05	0		r_3161
23	r_2036	0	0.00E+00	0	0	0	0		r_3162
24	r_2037	0	8.62E-06	0	0	3.07E-05	0		r_3163
25	r_2038	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_3164
26	r_2039	0	0.00E+00	0	0	0	0		r_3165
27	r_2040	0	0.00E+00	0	0	0	0		r_3166
28	r_2041	0	0.00E+00	0	0	0	0		r_3167
29	r_2042	0	0.00E+00	0	0	0	0		r_3168
30	r_2043	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		r_3169
31	r_2044	0.00E+00	0	0	0.00E+00	0.00E+00	0		r_3170
32	r_2045	-0.56848	-0.56839	-0.56852	-5.81E-01	-5.80E-01	-0.58065		r_3171
33	r_2046	0	8.684E-07	0	0.00E+00	3.09E-06	0		r_3172
34	r_2049	0	0	0	0.00E+00	0.00E+00	0		r_3173
35	r_2050	0	0	0	0.00E+00	0.00E+00	0		r_3174
36	r_2051	0	1.016E-06	0	0	3.62E-06	0		r_3175
37	r_2052	0	6.698E-07	0	0.00E+00	2.38E-06	0		r_3176
38	r_2053	0.000603	0.000606	0.000603	6.49E-04	6.53E-04	6.49E-04		r_3176
39	r_2054	0.000603	0.000606	0.000603	0.000649	0.000653	6.49E-04		r_3177
40	r_2055	0	4.054E-07	0	0.00E+00	1.44E-06	0		r_3177
41	r_2056	0	3.638E-06	0	0	1.29E-05	0		r_3178
42	r_2057	0	0	-3.64E-06	0.00E+00	0.00E+00	-1.3E-05		r_3178
43	r_2058	0	0	0.00E+00	0	0	0		r_3179
44	r_2060	-6.80E-03	-0.006801	-0.00681	-7.32E-03	-7.32E-03	-0.00737		r_3179
45	r_2061	0	1.216E-05	0	0.00E+00	4.33E-05	0.00E+00		r_3180
46	r_2062	0	0	0.00E+00	0.00E+00	0.00E+00	0		r_3180
47	r_2063	0	2.744E-05	0	0.00E+00	9.77E-05	0		r_3181
48	r_2064	0	1.746E-05	0	0	6.21E-05	0		r_3181
49	r_2065	0	1.746E-05	0	0.00E+00	6.21E-05	0		r_3182
50	r_2066	0	0	0	0.00E+00	0.00E+00	0		r_3182
51	r_2067	0	0	0	0	0	0		r_3183

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2	r_2068	0	0	0	0.00E+00	0.00E+00	0	r_3183
3	r_2069	0	0	0	0.00E+00	0.00E+00	0	r_3184
4	r_2070	0	0	0	0.00E+00	0.00E+00	0	r_3184
5	r_2071	0	0	0	0	0	0	r_3185
6	r_2072	0	0.0164211	0	0.00E+00	1.78E-02	0	r_3185
7	r_2073	0	0	0	0.00E+00	0.00E+00	0.00E+00	r_3186
8	r_2074	0	4.803E-05	0	0	0.000171	0	r_3186
9	r_2075	0	0	0	0.00E+00	0.00E+00	0	r_3187
10	r_2080	0	1.746E-05	0.00E+00	0.00E+00	6.21E-05	0	r_3187
11	r_2082	0	0	0	0.00E+00	0.00E+00	0.00E+00	r_3188
12	r_2083	0	9.371E-07	0	0.00E+00	3.33E-06	0.00E+00	r_3188
13	r_2084	0	9.37E-07	0	0.00E+00	3.33E-06	0	r_3189
14	r_2085	0.00E+00	0.00E+00	-9.37E-07	0.00E+00	0.00E+00	-3.3E-06	r_3189
15	r_2086	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	r_3190
16	r_2087	0	0	0	0.00E+00	0.00E+00	0	r_3190
17	r_2089	0	0	0	0	0	0	r_3191
18	r_2090	0	0	0	0	0	0	r_3191
19	r_2091	0	9.236E-06	0	0	3.29E-05	0	r_3192
20	r_2092	0	0	0	0	0	0	r_3192
21	r_2093	0.016328	1000	-1000	0.033875	1000	-1000	r_3192
22	r_2094	-0.00057	-0.000521	-0.00063	-0.00061	-0.00044	-0.00074	r_3193
23	r_2095	0.00E+00	0	0	0.00E+00	0.00E+00	0.00E+00	r_3193
24	r_2096	-8.37517	-8.37E+00	-8.37536	-8.52E+00	-8.52E+00	-8.51763	r_3193
25	r_2097	0	1.00E+03	-1000	0	1000	-1000	r_3194
26	r_2098	0	2.74E-05	-8.25E-06	0	9.77E-05	-2.94E-05	r_3194
27	r_2099	0	2.74E-05	0.00E+00	0	9.77E-05	0	r_3194
28	r_2100	3.722078	3.72E+00	1.76E+00	3.53E+00	3.53E+00	1.535111	r_3195
29	r_2101	0	0.00E+00	-2.22E-06	0	0	-7.9E-06	r_3195
30	r_2102	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	r_3195
31	r_2103	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	r_3196
32	r_2104	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	r_3196
33	r_2105	0	0	0	0.00E+00	0.00E+00	0.00E+00	r_3196
34	r_2106	0	2.43E-07	0.00E+00	0	8.64E-07	0	r_3197
35	r_2107	0.00E+00	2.74E-05	-2.43E-07	0	9.77E-05	-8.6E-07	r_3197
36	r_2108	0.08798	8.80E-02	8.80E-02	0.094757	0.094757	0.094756	r_3197
37	r_2110	0	0.00E+00	0.00E+00	0	0	0	r_3198
38	r_2111	0.08798	8.80E-02	8.80E-02	0.094757	0.094757	0.094756	r_3198
39	r_2125	-2.9E-05	1.00E+03	-1.00E+03	-1.49E-04	1.00E+03	-1000	r_3198
40	r_2129	0	1.92E-04	0.00E+00	0	0.000684	0.00E+00	r_3199
41	r_2133	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3199
42	r_2134	0	2.586E-07	0	0	9.2E-07	0.00E+00	r_3199
43	r_2136	0	0	-2.6E-07	0	0	-9.20E-07	r_3200
44	r_2137	0	2.32E-07	0	0.00E+00	8.26E-07	0.00E+00	r_3200
45	r_2139	0	0	-2.3E-07	0	0	-8.26E-07	r_3200
46	r_2184	0	0	-7.2E-07	0.00E+00	0.00E+00	-2.6E-06	r_3201
47	r_2185	0	0	-6.3E-07	0.00E+00	0.00E+00	-2.2E-06	r_3201
48	r_2186	0	0	-5.6E-07	0.00E+00	0.00E+00	-2.00E-06	r_3201
49	r_2187	0	9.683E-07	0	0	3.45E-06	0.00E+00	r_3202
50	r_2188	0	8.133E-07	0	0	2.89E-06	0.00E+00	r_3202
51	r_2189	0	4.004E-07	0	0	1.42E-06	0.00E+00	r_3202

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2	r_2190	0	0	-9.7E-07	0.00E+00	0.00E+00	-3.4E-06		r_3203
3	r_2191	0	0.00E+00	-8.1E-07	0.00E+00	0.00E+00	-2.89E-06		r_3203
4	r_2192	0	0.00E+00	-4E-07	0	0	-1.42E-06		r_3203
5	r_2193	0	5.05E-07	0.00E+00	0.00E+00	1.80E-06	0.00E+00		r_3204
6	r_2229	0.00E+00	0	-9.7E-07	0	0	-3.45E-06		r_3204
7	r_2230	0.00E+00	0	-8.1E-07	0	0	-2.9E-06		r_3204
8	r_2231	0.00E+00	3.007E-06	-1.7E-05	0	1.07E-05	-6.2E-05		r_3205
9	r_2812	0	0	0.00E+00	0	0	0		r_3205
10	r_2813	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		r_3205
11	r_2814	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		r_3206
12	r_2815	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		r_3206
13	r_2816	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		r_3206
14	r_2817	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		r_3207
15	r_2818	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		r_3207
16	r_2819	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		r_3207
17	r_3332	0	4.80E-05	0	0	0.000171	0.00E+00		r_3208
18	r_3333	0	4.80E-05	0	0	0.000171	0		r_3209
19	r_3334	0	4.803E-05	0	0.00E+00	1.71E-04	0		r_3210
20	r_3335	0	4.803E-05	0	0.00E+00	1.71E-04	0		r_3211
21	r_3336	0.00E+00	4.803E-05	0	0.00E+00	1.71E-04	0.00E+00		r_3212
22	r_3337	0	4.80E-05	0	0	0.000171	0.00E+00		r_3213
23	r_3338	0	4.803E-05	0.00E+00	0.00E+00	1.71E-04	0		r_3214
24	r_3339	0	4.803E-05	0.00E+00	0.00E+00	1.71E-04	0.00E+00		r_3215
25	r_3340	0	4.80E-05	0	0	0.000171	0		r_3216
26	r_3341	0	4.803E-05	0.00E+00	0.00E+00	1.71E-04	0		r_3216
27	r_3342	0	4.80E-05	0	0.00E+00	1.71E-04	0		r_3217
28	r_3343	0	4.80E-05	0	0.00E+00	1.71E-04	0		r_3217
29	r_3344	0	4.80E-05	0	0.00E+00	1.71E-04	0		r_3218
30	r_3345	0	4.80E-05	0	0.00E+00	1.71E-04	0		r_3218
31	r_3346	0	4.80E-05	0	0.00E+00	1.71E-04	0.00E+00		r_3219
32	r_3347	0	4.80E-05	0	0	0.000171	0		r_3219
33	r_3508	0	1.746E-05	0	0	6.21E-05	0		r_3220
34	r_3509	0	1.746E-05	-1.1E-05	0.00E+00	6.21E-05	-3.84E-05		r_3220
35	r_3510	0.00E+00	1000	-1000	0.00E+00	1.00E+03	-1000		r_3221
36	r_3511	0.00E+00	1000	-1000	0.00E+00	1.00E+03	-1000		r_3221
37	r_3512	0	1.00E+03	-1.00E+03	0.00E+00	1.00E+03	-1000		r_3222
38	r_3513	0	1.00E+03	-1.00E+03	0.00E+00	1.00E+03	-1.00E+03		r_3222
39	r_3514	0.000114	3.04E-04	1.14E-04	0.000122	0.000529	0.000122		r_3223
40	r_3515	0	1.00E+03	-1.00E+03	0	1000	-1000		r_3223
41	r_3516	0	1.00E+03	-1.00E+03	0.00E+00	1.00E+03	-1.00E+03		r_3224
42	r_3517	0.001796	1.00E+03	-1.00E+03	1.82E-03	1.00E+03	-1000		r_3225
43	r_3518	0	1.00E+03	-1.00E+03	0.00E+00	1.00E+03	-1.00E+03		r_3226
44	r_3519	0.000109	1.00E+03	-1.00E+03	1.18E-04	1.00E+03	-1.00E+03		r_3227
45	r_3520	0	1.00E+03	-1.00E+03	0	1000	-1000		r_3228
46	r_3521	0	0.00E+00	-6.67E-06	0.00E+00	0.00E+00	-2.4E-05		r_3229
47	r_3522	0	0.00E+00	-4.12E-06	0	0	-1.47E-05		r_3230
48	r_3523	0	1.00E+03	-1.00E+03	0	1000	-1000		r_3231
49	r_3524	0	1.00E+03	-1.00E+03	0	1000	-1000		r_3232
50	r_3525	0.000116	6.95E-04	4.18E-05	0.000125	0.001372	-7.4E-05		r_3233
51	r_3526	-0.00194	-1.84E-03	-2.13E-03	-0.00209	-0.00186	-0.00247		r_3234
52									
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2	r_3527	-0.00011	-1.14E-04	-3.04E-04	-0.00012	-0.00012	-0.00053	r_3235
3	r_3528	-0.00202	1.00E+03	-1000	-0.00206	1000	-1000	r_3236
4	r_3529	0.000227	6.08E-04	0.000227	0.000245	0.001057	0.000245	r_3237
5	r_3530	-0.00023	-2.27E-04	-0.00061	-2.45E-04	-2.45E-04	-0.00106	r_3238
6	r_3531	0.000915	9.47E-04	0.000911	0.000985	0.001099	0.000971	r_3239
7	r_3532	0.000915	9.47E-04	0.000911	0.000985	0.001099	0.000971	r_3240
8	r_3533	-0.00091	-9.11E-04	-0.00095	-9.85E-04	-9.71E-04	-0.0011	r_3241
9	r_3534	0.000843	8.55E-04	0.000737	9.08E-04	9.50E-04	0.000528	r_3242
10	r_3535	0	1.07E-04	0	0	0.00038	0	r_3243
11	r_3536	-0.00081	1000	-1000	-0.00087	1000	-1000	r_3244
12	r_3537	0	0	-0.00011	0.00E+00	0.00E+00	-0.00023	r_3245
13	r_3538	0.000843	0.0008991	0.000806	9.08E-04	1.10E-03	0.000858	r_3246
14	r_3539	0	0	-7.4E-05	0.00E+00	0.00E+00	-1.99E-04	r_3247
15	r_3540	-0.00084	-0.000806	-0.00088	-0.00091	-0.00086	-0.00105	r_3248
16	r_3541	0	0	0	0	0	0.00E+00	r_3249
17	r_3542	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_3250
18	r_3543	-3.79E-05	1.00E+03	-1.00E+03	-4.1E-05	1000	-1000	r_3251
19	r_3544	3.79E-05	1.00E+03	-1.00E+03	4.08E-05	1.00E+03	-1000	r_3252
20	r_3545	0.000527	0.0005278	5.23E-04	5.67E-04	5.71E-04	0.000553	r_3252
21	r_3546	0.000316	0.0003443	2.80E-04	3.41E-04	4.39E-04	0.000292	r_3253
22	r_3547	0.00114	1.14E-03	0.001128	0.001228	0.001237	0.001185	r_3253
23	r_3548	-0.00114	-0.001128	-1.14E-03	-0.00123	-0.00118	-0.00124	r_3254
24	r_3549	0	0	0	0	0	0	r_3255
25	r_3550	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3256
26	r_3551	0	0.00E+00	0	0	0	0	r_3257
27	r_3552	7.14E-05	1.00E+03	-1000	7.69E-05	1000	-1000	r_3258
28	r_3553	0	2.74E-05	0	0	9.77E-05	0	r_3259
29	r_3554	0	5.64E-05	-0.00014	-1.18E-04	1.29E-04	-0.00022	r_3260
30	r_3555	0	3.97E-05	-3.2E-05	0	0.000111	-0.00011	r_3261
31	r_3556	0	4.15E-05	-6.2E-05	0	0.000113	-0.00016	r_3262
32	r_3557	0	3.97E-05	-3.2E-05	0.00E+00	1.11E-04	-1.14E-04	r_3263
33	r_3558	0.00E+00	4.15E-05	-6.2E-05	0.00E+00	1.13E-04	-0.00016	r_3264
34	r_3559	0.00E+00	3.973E-05	-3.2E-05	0.00E+00	1.11E-04	-0.00011	r_3264
35	r_3560	0	2.744E-05	-3.20E-05	0.00E+00	9.77E-05	-1.14E-04	r_3264
36	r_3561	0.00E+00	2.74E-05	-3.20E-05	0	9.77E-05	-1.14E-04	r_3264
37	r_3562	-2.07E-04	-1.59E-04	-2.07E-04	-0.00022	-5.2E-05	-2.23E-04	r_3265
38	r_3563	0	4.803E-05	-3.20E-05	0	0.000171	-0.00011	r_3265
39	r_3564	0	4.803E-05	-3.1E-05	0	0.000171	-1.09E-04	r_3265
40	r_3565	0	4.803E-05	-1.6E-05	0	0.000171	-5.56E-05	r_3265
41	r_3566	0	4.803E-05	-3.1E-05	0.00E+00	1.71E-04	-1.09E-04	r_3266
42	r_3567	0	4.803E-05	-1.6E-05	0.00E+00	1.71E-04	-5.6E-05	r_3266
43	r_3568	0	4.80E-05	-1.5E-05	0	0.000171	-5.4E-05	r_3266
44	r_3569	0	4.80E-05	-1E-05	0	0.000171	-3.7E-05	r_3266
45	r_3570	0	1.13E-05	0	0	3.97E-05	0	r_3267
46	r_3571	-2.9E-05	1.00E+03	-1000	-3.2E-05	1000	-1000	r_3267
47	r_3572	0	1.00E+03	-1000	0	1000	-1000	r_3267
48	r_3573	0	1.00E+03	-1000	0.00E+00	1.00E+03	-1.00E+03	r_3267
49	r_3574	0.00E+00	1.00E+03	-1.00E+03	0.00E+00	1.00E+03	-1000	r_3268
50	r_3575	0	1000	-1000	0	1000	-1000	r_3268
51	r_3576	0	1000	-1000	0	1000	-1.00E+03	r_3268

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2	r_3577	2.95E-05	1000	-1000	0.000149	1000	-1000	r_3268
3	r_3578	0	1000	-1000	0	1000	-1000	r_3269
4	r_3579	0	1000	-1000	0	1000	-1000	r_3269
5	r_3580	0.00E+00	1000	-1000	0	1000	-1000	r_3269
6	r_3581	0	8.11E-05	0	0.00E+00	2.88E-04	0	r_3269
7	r_3582	0.00E+00	4.61E-05	0.00E+00	0.00E+00	1.64E-04	0.00E+00	r_3270
8	r_3583	0	4.61E-05	0.00E+00	0	0.000164	0	r_3270
9	r_3584	0	0.00E+00	-4.61E-05	0	0	-0.00016	r_3270
10	r_3585	-2.9E-05	1.00E+03	-1.00E+03	-3.2E-05	1000	-1.00E+03	r_3270
11	r_3586	2.95E-05	1.00E+03	-1.00E+03	3.17E-05	1000	-1.00E+03	r_3271
12	r_3587	2.95E-05	1.00E+03	-1.00E+03	3.17E-05	1000	-1.00E+03	r_3271
13	r_3588	0	1.37E-04	-2.74E-05	0.000118	0.000215	-9.77E-05	r_3271
14	r_3589	0	3.20E-05	-2.74E-05	0.00E+00	1.14E-04	-9.77E-05	r_3271
15	r_3590	0	6.17E-05	-2.74E-05	0	0.00016	-9.77E-05	r_3272
16	r_3591	0	3.20E-05	-2.74E-05	0.00E+00	1.14E-04	-9.77E-05	r_3272
17	r_3592	0	6.17E-05	-2.74E-05	0	0.00016	-9.77E-05	r_3272
18	r_3593	0	3.20E-05	-2.74E-05	0.00E+00	1.14E-04	-9.77E-05	r_3272
19	r_3594	0	3.20E-05	-2.74E-05	0.00E+00	1.14E-04	-9.77E-05	r_3273
20	r_3595	0	3.20E-05	-2.74E-05	0	0.000114	-9.77E-05	r_3273
21	r_3596	0	2.74E-05	0.00E+00	0.00E+00	9.77E-05	0	r_3273
22	r_3597	0	1.19E-05	0.00E+00	0.00E+00	4.22E-05	0	r_3273
23	r_3598	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	r_3274
24	r_3599	0	1.00E+03	-1.00E+03	0	1000	-1.00E+03	r_3274
25	r_3600	0	1.00E+03	-1.00E+03	0	1000	-1.00E+03	r_3274
26	r_3601	0	4.80E-05	0.00E+00	0	0.000171	0.00E+00	r_3274
27	r_3602	0	0.00E+00	-4.80E-05	0.00E+00	0.00E+00	-0.00017	r_3275
28	r_3603	0	0.00E+00	-4.80E-05	0.00E+00	0.00E+00	-1.71E-04	r_3275
29	r_3604	0	4.80E-05	0.00E+00	0.00E+00	1.71E-04	0.00E+00	r_3275
30	r_3605	0	0.00E+00	-4.80E-05	0.00E+00	0.00E+00	-1.71E-04	r_3275
31	r_3606	0	1.07E-05	0.00E+00	0.00E+00	3.78E-05	0	r_3276
32	r_3607	0	1.14E-06	0.00E+00	0.00E+00	4.06E-06	0	r_3276
33	r_3608	0	1.07E-05	0.00E+00	0.00E+00	3.78E-05	0	r_3276
34	r_3609	0	2.74E-05	0.00E+00	0	9.77E-05	0	r_3276
35	r_3610	0	1.07E-05	0.00E+00	0	3.78E-05	0	r_3277
36	r_3611	0	2.74E-05	0.00E+00	0	9.77E-05	0	r_3277
37	r_3612	0	0.00E+00	0.00E+00	0	0	0	r_3277
38	r_3613	0	0	0.00E+00	0	0	0.00E+00	r_3277
39	r_3614	0	1000	-1.00E+03	0.00E+00	1.00E+03	-1.00E+03	r_3278
40	r_3615	0	1000	-1.00E+03	0	1000	-1.00E+03	r_3278
41	r_3616	0	4.803E-05	-2.40E-05	0.00E+00	1.71E-04	-8.54E-05	r_3278
42	r_3617	0	4.80E-05	-2.4E-05	0	0.000171	-8.54E-05	r_3278
43	r_3618	0	4.80E-05	-2.4E-05	0.00E+00	1.71E-04	-8.54E-05	r_3279
44	r_3619	0	4.80E-05	-2.4E-05	0.00E+00	1.71E-04	-8.54E-05	r_3279
45	r_3620	0	4.80E-05	-2.4E-05	0	0.000171	-8.54E-05	r_3279
46	r_3621	0	4.80E-05	-2.4E-05	0.00E+00	1.71E-04	-8.54E-05	r_3279
47	r_3622	0	4.80E-05	-2.4E-05	0	0.000171	-8.5E-05	r_3280
48	r_3623	0	4.80E-05	-2.4E-05	0.00E+00	1.71E-04	-8.5E-05	r_3280
49	r_3624	0	4.80E-05	-4.8E-05	0	0.000171	-0.00017	r_3280
50	r_3625	0	4.80E-05	-4.8E-05	0	0.000171	-0.00017	r_3280
51	r_3626	0	4.80E-05	-4.8E-05	0	0.000171	-0.00017	r_3281
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2	r_3627	0	4.80E-05	-4.8E-05	0	0.000171	-0.00017		r_3281
3	r_3628	0	4.80E-05	-4.8E-05	0	0.000171	-0.00017		r_3281
4	r_3629	0	4.80E-05	-4.8E-05	0.00E+00	1.71E-04	-0.00017		r_3281
5	r_3630	0	4.80E-05	-4.8E-05	0.00E+00	1.71E-04	-0.00017		r_3282
6	r_3631	0	4.80E-05	-4.8E-05	0.00E+00	1.71E-04	-1.71E-04		r_3282
7	r_3632	0	2.40E-05	0	0.00E+00	8.54E-05	0		r_3282
8	r_3633	0	2.40E-05	0	0.00E+00	8.54E-05	0		r_3282
9	r_3634	0	2.40E-05	0	0.00E+00	8.54E-05	0.00E+00		r_3283
10	r_3635	0	2.40E-05	0	0.00E+00	8.54E-05	0		r_3283
11	r_3636	0	2.40E-05	0	0.00E+00	8.54E-05	0		r_3283
12	r_3637	0	2.40E-05	0	0	8.54E-05	0		r_3283
13	r_3638	0	2.40E-05	0	0.00E+00	8.54E-05	0		r_3284
14	r_3639	0	2.40E-05	0.00E+00	0.00E+00	8.54E-05	0		r_3284
15	r_3640	0	0.00E+00	0.00E+00	0	0	0		r_3284
16	r_3641	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		r_3284
17	r_3642	0	0.00E+00	0.00E+00	0	0	0		r_3285
18	r_3643	0	0	0.00E+00	0	0	0.00E+00		r_3285
19	r_3644	0	0	0.00E+00	0	0	0.00E+00		r_3285
20	r_3645	0	0	0.00E+00	0	0	0		r_3285
21	r_3646	0	0	0.00E+00	0	0	0		r_3286
22	r_3647	0	0.00E+00	0.00E+00	0	0	0.00E+00		r_3286
23	r_3648	0	4.80E-05	0.00E+00	0	0.000171	0		r_3286
24	r_3649	0	0.00E+00	-4.80E-05	0	0	-0.00017		r_3286
25	r_3650	0	1.92E-04	-4.80E-05	0	0.000512	-0.00017		r_3287
26	r_3651	0	4.803E-05	0	0.00E+00	1.71E-04	0		r_3287
27	r_3652	0	0.00E+00	-4.8E-05	0.00E+00	0.00E+00	-0.00017		r_3287
28	r_3653	0	0.00E+00	-0.00019	0.00E+00	0.00E+00	-0.00051		r_3287
29	r_3654	0	2.40E-05	0	0.00E+00	8.54E-05	0		r_3288
30	r_3655	0	2.40E-05	0	0.00E+00	8.54E-05	0		r_3288
31	r_3656	0	2.40E-05	0	0.00E+00	8.54E-05	0		r_3288
32	r_3657	0	2.40E-05	0	0.00E+00	8.54E-05	0		r_3288
33	r_3658	0	2.40E-05	0	0.00E+00	8.54E-05	0		r_3289
34	r_3659	0	2.40E-05	0	0	8.54E-05	0		r_3289
35	r_3660	0	2.40E-05	0	0	8.54E-05	0		r_3289
36	r_3661	0	2.401E-05	0	0.00E+00	8.54E-05	0.00E+00		r_3289
37	r_3662	0	1.07E-04	0	0	0.000235	0		r_3290
38	r_3663	0	0	-0.00011	0	0	-0.00023		r_3290
39	r_3664	0	1.92E-04	-4.8E-05	0	0.000512	-0.00017		r_3290
40	r_3665	0	0	-0.00019	0	0	-0.00051		r_3290
41	r_3666	0	4.80E-05	0	0	0.000171	0		r_3291
42	r_3667	0	0.00E+00	-4.8E-05	0	0	-0.00017		r_3291
43	r_3668	0	1.07E-04	0	0	0.000235	0		r_3291
44	r_3669	-0.00047	-0.000282	-0.00048	-0.00051	0	-0.00051		r_3291
45	r_3670	0	0.00E+00	0	0.00E+00	0.00E+00	0		r_3292
46	r_3671	0	0	0	0	0	0		r_3292
47	r_3672	0	5.36E-05	0	0.00E+00	1.17E-04	0		r_3292
48	r_3673	0	3.691E-05	0	0	9.93E-05	0		r_3292
49	r_3674	0	4.05E-05	0	0.00E+00	1.03E-04	0		r_3293
50	r_3675	0	3.69E-05	0	0.00E+00	9.93E-05	0		r_3293
51	r_3676	0	4.05E-05	0	0	0.000103	0		r_3293

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2	r_3677	0	3.691E-05	0	0	9.93E-05	0	r_3293
3	r_3678	0.00E+00	0.00E+00	0.00E+00	0	0	0	r_3294
4	r_3679	0	0	0	0	0	0	r_3294
5	r_3680	0	0	0	0	0	0	r_3294
6	r_3681	0	1000	-1000	0	1000	-1000	r_3294
7	r_3682	0	1000	-1000	0.00E+00	1.00E+03	-1000	r_3295
8	r_3683	0	1000	-1000	0.00E+00	1.00E+03	-1000	r_3295
9	r_3684	0	1000	-1000	0.00E+00	1.00E+03	-1000	r_3295
10	r_3685	0	2.744E-05	-0.00011	-1.18E-04	9.77E-05	-1.18E-04	r_3295
11	r_3686	0.00E+00	2.74E-05	-3.20E-05	0.00E+00	9.77E-05	-0.00011	r_3296
12	r_3687	0	2.744E-05	-6.2E-05	0.00E+00	9.77E-05	-1.13E-04	r_3297
13	r_3688	0	2.744E-05	-2.74E-05	0.00E+00	9.77E-05	-9.77E-05	r_3298
14	r_3689	0	2.744E-05	-3.2E-05	0.00E+00	9.77E-05	-1.14E-04	r_3299
15	r_3690	0	2.744E-05	-3.20E-05	0.00E+00	9.77E-05	-1.14E-04	r_3300
16	r_3691	0	2.744E-05	-2.11E-05	0.00E+00	9.77E-05	-7.50E-05	r_3301
17	r_3692	0	2.744E-05	-2.74E-05	0.00E+00	9.77E-05	-9.8E-05	r_3302
18	r_3693	0.00E+00	2.744E-05	-6.2E-05	0.00E+00	9.77E-05	-1.13E-04	r_3303
19	r_3694	0	2.74E-05	-3.2E-05	0.00E+00	9.77E-05	-1.14E-04	r_3304
20	r_3695	0	2.744E-05	-3.1E-05	0.00E+00	9.77E-05	-0.00011	r_3305
21	r_3696	0.00E+00	2.74E-05	-2.74E-05	0.00E+00	9.77E-05	-9.77E-05	r_3306
22	r_3697	0	2.744E-05	-2.1E-05	0.00E+00	9.77E-05	-7.50E-05	r_3307
23	r_3698	0	2.74E-05	-3.2E-05	0.00E+00	9.77E-05	-0.00011	r_3308
24	r_3699	0	2.74E-05	-1.6E-05	0.00E+00	9.77E-05	-5.6E-05	r_3309
25	r_3700	0	2.74E-05	-2.7E-05	0.00E+00	9.77E-05	-9.8E-05	r_3310
26	r_3701	0.00E+00	2.744E-05	-6.17E-05	0.00E+00	9.77E-05	-1.13E-04	r_3311
27	r_3702	0	2.74E-05	-3.20E-05	0.00E+00	9.77E-05	-1.14E-04	r_3312
28	r_3703	0	2.74E-05	-3.08E-05	0.00E+00	9.77E-05	-0.00011	r_3313
29	r_3704	0.00E+00	2.74E-05	-2.74E-05	0.00E+00	9.77E-05	-9.77E-05	r_3314
30	r_3705	0	2.74E-05	-2.11E-05	0.00E+00	9.77E-05	-7.50E-05	r_3315
31	r_3706	0	2.74E-05	-3.20E-05	0.00E+00	9.77E-05	-0.00011	r_3316
32	r_3707	0	2.74E-05	-1.57E-05	0.00E+00	9.77E-05	-5.6E-05	r_3317
33	r_3708	0	2.74E-05	-2.74E-05	0.00E+00	9.77E-05	-9.77E-05	r_3318
34	r_3709	0	2.744E-05	-3.1E-05	0.00E+00	9.77E-05	-1.09E-04	r_3319
35	r_3710	0	2.74E-05	-3.2E-05	0.00E+00	9.77E-05	-1.14E-04	r_3320
36	r_3711	0	2.74E-05	-2.1E-05	0.00E+00	9.77E-05	-7.32E-05	r_3321
37	r_3712	0	2.74E-05	-2.7E-05	0.00E+00	9.77E-05	-9.77E-05	r_3322
38	r_3713	0	2.74E-05	-1.6E-05	0.00E+00	9.77E-05	-5.59E-05	r_3323
39	r_3714	0.00E+00	2.74E-05	-3.20E-05	0.00E+00	9.77E-05	-1.14E-04	r_3324
40	r_3715	0	2.74E-05	-1.3E-05	0.00E+00	9.77E-05	-4.46E-05	r_3325
41	r_3716	0	2.74E-05	-2.7E-05	0.00E+00	9.77E-05	-9.77E-05	r_3326
42	r_3717	0	0	-2.7E-05	0.00E+00	0.00E+00	-9.77E-05	r_3327
43	r_3718	0	0.00E+00	-2.7E-05	0.00E+00	0.00E+00	-9.8E-05	r_3328
44	r_3719	0	0.00E+00	-2.7E-05	0.00E+00	0.00E+00	-9.8E-05	r_3329
45	r_3720	0	0.00E+00	-2.7E-05	0.00E+00	0.00E+00	-9.8E-05	r_3330
46	r_3721	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_3331
47	r_3722	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_3348
48	r_3723	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_3349
49	r_3724	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_3350
50	r_3725	0	2.744E-05	0	0.00E+00	9.77E-05	0.00E+00	r_3351
51	r_3726	0	2.744E-05	0	0.00E+00	9.77E-05	0	r_3352

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2	r_3727	0	2.744E-05	0	0.00E+00	9.77E-05	0	r_3353
3	r_3728	0	2.744E-05	0	0.00E+00	9.77E-05	0	r_3354
4	r_3729	0	2.744E-05	0	0.00E+00	9.77E-05	0	r_3355
5	r_3730	0	2.744E-05	0	0.00E+00	9.77E-05	0	r_3356
6	r_3731	0	2.744E-05	0	0.00E+00	9.77E-05	0	r_3357
7	r_3732	0	2.744E-05	0	0.00E+00	9.77E-05	0	r_3358
8	r_3733	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_3359
9	r_3734	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_3360
10	r_3735	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_3361
11	r_3736	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_3362
12	r_3737	0	2.74E-05	0	0.00E+00	9.77E-05	0	r_3363
13	r_3738	0	2.74E-05	0	0.00E+00	9.77E-05	0.00E+00	r_3364
14	r_3739	0	2.74E-05	0	0.00E+00	9.77E-05	0.00E+00	r_3365
15	r_3740	0.00E+00	2.74E-05	0.00E+00	0.00E+00	9.77E-05	0.00E+00	r_3366
16	r_3741	0.00E+00	2.74E-05	0.00E+00	0.00E+00	9.77E-05	0.00E+00	r_3367
17	r_3742	0	2.74E-05	0	0.00E+00	9.77E-05	0.00E+00	r_3368
18	r_3743	0.00E+00	2.74E-05	-2.74E-05	0.00E+00	9.77E-05	-9.77E-05	r_3369
19	r_3744	0.00E+00	2.74E-05	-2.74E-05	0	9.77E-05	-9.77E-05	r_3370
20	r_3745	0.00E+00	2.74E-05	-2.74E-05	0	9.77E-05	-9.77E-05	r_3371
21	r_3746	0	2.74E-05	-2.7E-05	0	9.77E-05	-9.77E-05	r_3372
22	r_3747	0	0.00E+00	-2.7E-05	0	0	-9.77E-05	r_3373
23	r_3748	0	0.00E+00	-2.7E-05	0.00E+00	0.00E+00	-9.77E-05	r_3374
24	r_3749	0	0	-2.7E-05	0.00E+00	0.00E+00	-9.77E-05	r_3375
25	r_3750	0	0.00E+00	-2.7E-05	0.00E+00	0.00E+00	-9.77E-05	r_3376
26	r_3751	0	2.74E-05	-2.7E-05	0.00E+00	9.77E-05	-9.77E-05	r_3377
27	r_3752	0	2.74E-05	-2.7E-05	0	9.77E-05	-9.8E-05	r_3378
28	r_3753	0	2.74E-05	-2.7E-05	0.00E+00	9.77E-05	-9.8E-05	r_3379
29	r_3754	0	2.74E-05	-2.7E-05	0.00E+00	9.77E-05	-9.8E-05	r_3380
30	r_3755	0	8.11E-05	0	0.00E+00	2.88E-04	0	r_3381
31	r_3756	0	2.30E-05	0	0.00E+00	8.17E-05	0	r_3382
32	r_3757	0	4.05E-05	0	0.00E+00	1.44E-04	0	r_3383
33	r_3758	0	1.79E-05	0	0.00E+00	6.36E-05	0	r_3384
34	r_3759	0	5.36E-05	0	0.00E+00	1.17E-04	0	r_3385
35	r_3760	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_3386
36	r_3761	0	4.05E-05	0	0.00E+00	1.03E-04	0	r_3387
37	r_3762	0	3.69E-05	0	0	9.93E-05	0	r_3388
38	r_3763	0	4.05E-05	0	0	0.000103	0	r_3389
39	r_3764	0	3.69E-05	0	0	9.93E-05	0	r_3390
40	r_3765	0.000475	4.75E-04	2.82E-04	5.11E-04	5.14E-04	0	r_3391
41	r_3766	0	4.35E-05	0.00E+00	0.00E+00	1.26E-04	0	r_3392
42	r_3767	0	8.11E-05	0.00E+00	0	0.000288	0	r_3393
43	r_3768	0	4.22E-05	0.00E+00	0	0.000114	0	r_3394
44	r_3769	0	8.11E-05	0.00E+00	0.00E+00	2.88E-04	0	r_3395
45	r_3770	0	4.22E-05	0.00E+00	0	0.000114	0	r_3396
46	r_3771	0	4.61E-05	0.00E+00	0	0.000152	0	r_3397
47	r_3772	0	4.22E-05	0.00E+00	0	0.000114	0	r_3398
48	r_3773	0.000475	4.75E-04	0.000282	0.000511	0.000514	0	r_3399
49	r_3774	0	4.35E-05	0	0	0.000126	0	r_3400
50	r_3775	0	8.11E-05	0	0	0.000288	0	r_3401
51	r_3776	0	4.22E-05	0	0.00E+00	1.14E-04	0	r_3402

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2	r_3777	0	8.11E-05	0	0.00E+00	2.88E-04	0	r_3403
3	r_3778	0	4.22E-05	0	0.00E+00	1.14E-04	0	r_3404
4	r_3779	0	4.61E-05	0	0.00E+00	1.52E-04	0	r_3405
5	r_3780	0	4.22E-05	0	0.00E+00	1.14E-04	0	r_3406
6	r_3781	0	1000	-1000	0.00E+00	1.00E+03	-1000	r_3407
7	r_3782	0	1000	-1000	0.00E+00	1.00E+03	-1000	r_3408
8	r_3783	0	1000	-1000	0.00E+00	1.00E+03	-1000	r_3409
9	r_3784	0	1000	-1000	0	1000	-1000	r_3410
10	r_3785	0	1000	-1000	0	1000	-1000	r_3411
11	r_3786	0	1000	-1000	0	1000	-1000	r_3412
12	r_3787	0	1000	-1000	0.00E+00	1.00E+03	-1000	r_3413
13	r_3788	0	1000	-1000	0.00E+00	1.00E+03	-1000	r_3414
14	r_3789	-0.00011	0	-0.00018	-0.00012	0	-0.00032	r_3415
15	r_3790	0	0	-7.4E-05	0	0	-0.0002	r_3416
16	r_3791	0	0	-8.5E-05	0	0	-0.00022	r_3417
17	r_3792	0	0	-7.4E-05	0	0	-0.0002	r_3418
18	r_3793	0	0	-8.5E-05	0	0	-0.00022	r_3419
19	r_3794	0	0	-7.4E-05	0	0	-0.0002	r_3420
20	r_3795	0	0	-7.4E-05	0.00E+00	0.00E+00	-0.0002	r_3421
21	r_3796	0	0	-7.4E-05	0	0	-0.0002	r_3422
22	r_3797	0.00E+00	0.0001071	0	0.00E+00	2.35E-04	0	r_3423
23	r_3798	0.00E+00	7.382E-05	0	0	0.000199	0	r_3424
24	r_3799	0	8.09E-05	0	0.00E+00	2.06E-04	0	r_3425
25	r_3800	0	7.38E-05	0	0.00E+00	1.99E-04	0	r_3426
26	r_3801	0	8.09E-05	0	0.00E+00	2.06E-04	0	r_3427
27	r_3802	0	7.38E-05	0	0.00E+00	1.99E-04	0	r_3428
28	r_3803	0	7.38E-05	0	0.00E+00	1.99E-04	0	r_3428
29	r_3804	0	7.38E-05	0	0.00E+00	1.99E-04	0	r_3429
30	r_3805	0.000109	1.37E-04	-7.2E-06	1.18E-04	2.16E-04	-0.00013	r_3429
31	r_3806	0	7.38E-05	-4.8E-05	0	0.000149	-0.00017	r_3430
32	r_3807	0	8.13E-05	-4.80E-05	0.00E+00	1.63E-04	-0.00017	r_3430
33	r_3808	0	7.38E-05	-4.80E-05	0.00E+00	1.49E-04	-0.00017	r_3431
34	r_3809	0	8.13E-05	-4.80E-05	0.00E+00	1.63E-04	-0.00017	r_3431
35	r_3810	0	7.38E-05	-4.80E-05	0.00E+00	1.49E-04	-1.71E-04	r_3432
36	r_3811	0	7.38E-05	-4.80E-05	0.00E+00	1.49E-04	-0.00017	r_3432
37	r_3812	0	7.38E-05	-4.80E-05	0.00E+00	1.49E-04	-0.00017	r_3433
38	r_3813	0	1.92E-04	0.00E+00	0.00E+00	5.12E-04	0.00E+00	r_3433
39	r_3814	0	3.73E-05	0.00E+00	0.00E+00	1.08E-04	0.00E+00	r_3434
40	r_3815	0	5.70E-05	0	0.00E+00	2.03E-04	0	r_3434
41	r_3816	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_3435
42	r_3817	0	5.70E-05	0	0.00E+00	2.03E-04	0	r_3435
43	r_3818	0.00E+00	3.69E-05	0.00E+00	0.00E+00	9.93E-05	0.00E+00	r_3436
44	r_3819	0	3.79E-05	0	0.00E+00	1.25E-04	0.00E+00	r_3436
45	r_3820	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_3437
46	r_3821	0	1.92E-04	0	0.00E+00	5.12E-04	0.00E+00	r_3437
47	r_3822	0	3.73E-05	0	0.00E+00	1.08E-04	0.00E+00	r_3438
48	r_3823	0	5.70E-05	0	0.00E+00	2.03E-04	0	r_3438
49	r_3824	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_3439
50	r_3825	0	5.70E-05	0	0.00E+00	2.03E-04	0	r_3439
51	r_3826	0	3.69E-05	0	0.00E+00	9.93E-05	0.00E+00	r_3440
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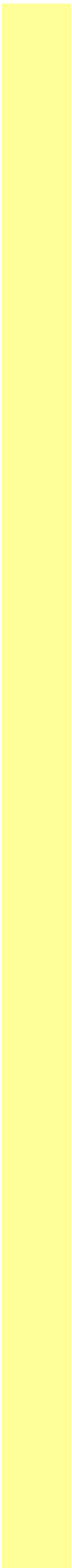
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2	r_3827	0	3.79E-05	0	0.00E+00	1.25E-04	0.00E+00	r_3440
3	r_3828	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_3441
4	r_3829	0	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00	r_3441
5	r_3830	0	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00	r_3442
6	r_3831	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3442
7	r_3832	0	0.00E+00	0	0.00E+00	0.00E+00	0	r_3443
8	r_3833	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	r_3443
9	r_3834	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	r_3444
10	r_3835	0	0	0	0.00E+00	0.00E+00	0.00E+00	r_3444
11	r_3836	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0	r_3445
12	r_3837	0	4.80E-05	0	0.00E+00	1.71E-04	0.00E+00	r_3445
13	r_3838	0	4.80E-05	0	0.00E+00	1.71E-04	0.00E+00	r_3446
14	r_3839	0	4.80E-05	0	0.00E+00	1.71E-04	0.00E+00	r_3446
15	r_3840	0	4.80E-05	0	0	0.000171	0.00E+00	r_3447
16	r_3841	0	4.80E-05	0	0	0.000171	0.00E+00	r_3447
17	r_3842	0	4.80E-05	0	0	0.000171	0.00E+00	r_3448
18	r_3843	0	4.80E-05	0	0.00E+00	1.71E-04	0	r_3448
19	r_3844	0.00E+00	4.80E-05	0.00E+00	0.00E+00	1.71E-04	0	r_3449
20	r_3845	0.00E+00	1.92E-04	0.00E+00	0.00E+00	5.12E-04	0	r_3449
21	r_3846	0	3.73E-05	0	0.00E+00	1.08E-04	0.00E+00	r_3450
22	r_3847	0.00E+00	5.70E-05	0.00E+00	0.00E+00	2.03E-04	0	r_3450
23	r_3848	0.00E+00	3.69E-05	0.00E+00	0.00E+00	9.93E-05	0	r_3451
24	r_3849	0.00E+00	5.70E-05	0.00E+00	0.00E+00	2.03E-04	0	r_3451
25	r_3850	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_3452
26	r_3851	0	3.79E-05	0	0.00E+00	1.25E-04	0	r_3452
27	r_3852	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_3453
28	r_3853	0	0.0001921	0	0.00E+00	5.12E-04	0	r_3453
29	r_3854	0	3.727E-05	0	0.00E+00	1.08E-04	0	r_3454
30	r_3855	0	5.7E-05	0.00E+00	0.00E+00	2.03E-04	0	r_3454
31	r_3856	0	3.69E-05	0	0.00E+00	9.93E-05	0	r_3455
32	r_3857	0	5.7E-05	0.00E+00	0.00E+00	2.03E-04	0	r_3455
33	r_3858	0	3.691E-05	0.00E+00	0.00E+00	9.93E-05	0	r_3456
34	r_3859	0.00E+00	3.79E-05	0.00E+00	0.00E+00	1.25E-04	0	r_3456
35	r_3860	0.00E+00	3.69E-05	0.00E+00	0.00E+00	9.93E-05	0	r_3457
36	r_3861	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3457
37	r_3862	0.00E+00	4.80E-05	0.00E+00	0.00E+00	1.71E-04	0	r_3458
38	r_3863	0.00E+00	4.80E-05	0.00E+00	0.00E+00	1.71E-04	0	r_3458
39	r_3864	0	4.80E-05	0	0.00E+00	1.71E-04	0	r_3459
40	r_3865	0.00E+00	4.80E-05	0.00E+00	0.00E+00	1.71E-04	0.00E+00	r_3459
41	r_3866	0.00E+00	4.80E-05	0.00E+00	0.00E+00	1.71E-04	0.00E+00	r_3460
42	r_3867	0	4.803E-05	0	0.00E+00	1.71E-04	0.00E+00	r_3460
43	r_3868	0	4.803E-05	0	0.00E+00	1.71E-04	0.00E+00	r_3461
44	r_3869	0	4.803E-05	-2.4E-05	0.00E+00	1.71E-04	-8.54E-05	r_3461
45	r_3870	0	4.803E-05	-2.4E-05	0.00E+00	1.71E-04	-8.54E-05	r_3462
46	r_3871	0	4.803E-05	-2.4E-05	0.00E+00	1.71E-04	-8.54E-05	r_3462
47	r_3872	0	4.803E-05	-2.4E-05	0.00E+00	1.71E-04	-8.54E-05	r_3463
48	r_3873	0	4.803E-05	-2.4E-05	0.00E+00	1.71E-04	-8.54E-05	r_3463
49	r_3874	0	4.803E-05	-2.4E-05	0.00E+00	1.71E-04	-8.54E-05	r_3464
50	r_3875	0	4.803E-05	-2.4E-05	0.00E+00	1.71E-04	-8.54E-05	r_3464
51	r_3876	0	4.803E-05	-2.4E-05	0.00E+00	1.71E-04	-8.54E-05	r_3465
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2	r_3877	0	4.219E-05	0	0	0.000114	0	r_3465
3	r_3878	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_3466
4	r_3879	0	4.219E-05	0	0	0.000114	0	r_3466
5	r_3880	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_3467
6	r_3881	0	4.219E-05	0	0	0.000114	0	r_3467
7	r_3882	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_3468
8	r_3883	0	4.219E-05	0	0	0.000114	0	r_3468
9	r_3884	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_3469
10	r_3885	0	0	0	0	0	0	r_3469
11	r_3886	0	0	0	0.00E+00	0.00E+00	0	r_3470
12	r_3887	0	0	0	0	0	0	r_3470
13	r_3888	0	0	0	0	0	0.00E+00	r_3471
14	r_3889	0	0	0	0	0	0	r_3471
15	r_3890	0	0	0	0	0	0	r_3472
16	r_3891	0	0	0	0.00E+00	0.00E+00	0	r_3472
17	r_3892	0	0	0	0.00E+00	0.00E+00	0	r_3473
18	r_3893	0	0	0	0.00E+00	0.00E+00	0	r_3473
19	r_3894	0	0	0	0.00E+00	0.00E+00	0	r_3474
20	r_3895	0	0	0	0	0	0	r_3474
21	r_3896	0	0	0	0.00E+00	0.00E+00	0	r_3475
22	r_3897	0	0	0	0	0	0	r_3475
23	r_3898	0	0	0	0	0	0	r_3476
24	r_3899	0	0	0	0	0	0	r_3476
25	r_3900	0	0	0	0	0	0	r_3477
26	r_3901	0	1000	-1000	0	1000	-1000	r_3477
27	r_3902	0	1000	-1000	0	1000	-1000	r_3478
28	r_3903	0	4.219E-05	0	0	0.000114	0	r_3478
29	r_3904	0	4.219E-05	0	0	0.000114	0	r_3479
30	r_3905	0	4.219E-05	0	0	0.000114	0	r_3479
31	r_3906	0	4.219E-05	0	0	0.000114	0	r_3480
32	r_3907	0	4.219E-05	0	0	0.000114	0	r_3480
33	r_3908	0	4.219E-05	0	0.00E+00	1.14E-04	0	r_3481
34	r_3909	0	4.219E-05	0	0.00E+00	1.14E-04	0.00E+00	r_3481
35	r_3910	0	4.219E-05	0	0.00E+00	1.14E-04	0.00E+00	r_3482
36	r_3911	0	4.803E-05	-4.8E-05	0.00E+00	1.71E-04	-0.00017	r_3482
37	r_3912	0	4.803E-05	-4.8E-05	0	0.000171	-0.00017	r_3483
38	r_3913	0	4.803E-05	-4.8E-05	0	0.000171	-0.00017	r_3483
39	r_3914	0	4.803E-05	-4.8E-05	0	0.000171	-0.00017	r_3484
40	r_3915	0	4.803E-05	-4.8E-05	0	0.000171	-0.00017	r_3484
41	r_3916	0	4.803E-05	-4.8E-05	0	0.000171	-0.00017	r_3485
42	r_3917	0	4.803E-05	-4.8E-05	0	0.000171	-0.00017	r_3485
43	r_3918	0	4.803E-05	-4.8E-05	0	0.000171	-0.00017	r_3486
44	r_3919	0	4.803E-05	0	0	0.000171	0	r_3486
45	r_3920	0	4.803E-05	0	0	0.000171	0	r_3487
46	r_3921	0	4.803E-05	0	0	0.000171	0	r_3487
47	r_3922	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3488
48	r_3923	0	4.803E-05	0	0	0.000171	0	r_3488
49	r_3924	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3489
50	r_3925	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3489
51	r_3926	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3490
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2	r_3927	0	2.744E-05	0	0.00E+00	9.77E-05	0	r_3490
3	r_3928	0	2.744E-05	0	0.00E+00	9.77E-05	0	r_3491
4	r_3929	0	2.401E-05	0	0.00E+00	8.54E-05	0	r_3491
5	r_3930	0	2.401E-05	0	0.00E+00	8.54E-05	0.00E+00	r_3492
6	r_3931	0	2.401E-05	0	0.00E+00	8.54E-05	0	r_3492
7	r_3932	0	2.401E-05	0	0.00E+00	8.54E-05	0	r_3493
8	r_3933	0	2.401E-05	0	0.00E+00	8.54E-05	0	r_3493
9	r_3934	0	2.401E-05	0	0.00E+00	8.54E-05	0.00E+00	r_3494
10	r_3935	0	2.401E-05	0	0.00E+00	8.54E-05	0.00E+00	r_3494
11	r_3936	0	2.401E-05	0	0.00E+00	8.54E-05	0	r_3495
12	r_3937	3.79E-05	3.837E-05	1.05E-05	4.08E-05	4.25E-05	-5.7E-05	r_3495
13	r_3938	0	2.251E-05	-2.7E-05	0.00E+00	4.03E-05	-9.8E-05	r_3496
14	r_3939	0	1000	-1000	0.00E+00	1.00E+03	-1000	r_3496
15	r_3940	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3497
16	r_3941	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3497
17	r_3942	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3498
18	r_3943	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3498
19	r_3944	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3499
20	r_3945	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3499
21	r_3946	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3500
22	r_3947	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3500
23	r_3948	0	4.803E-05	0	0.00E+00	1.71E-04	0	r_3501
24	r_3949	0	2.401E-05	0	0.00E+00	8.54E-05	0	r_3501
25	r_3950	0	2.401E-05	0	0.00E+00	8.54E-05	0	r_3502
26	r_3951	0	2.401E-05	0	0.00E+00	8.54E-05	0	r_3502
27	r_3952	0	2.401E-05	0	0.00E+00	8.54E-05	0	r_3503
28	r_3953	0	2.401E-05	0	0.00E+00	8.54E-05	0	r_3503
29	r_3954	0	2.401E-05	0	0.00E+00	8.54E-05	0.00E+00	r_3504
30	r_3955	0	2.401E-05	0	0.00E+00	8.54E-05	0	r_3504
31	r_3956	0	2.401E-05	0	0.00E+00	8.54E-05	0	r_3505
32	r_3957	0.000475	0.0004754	0.000282	5.11E-04	5.14E-04	-5.3E-05	r_3505
33	r_3958	0	0	0	0.00E+00	0.00E+00	0	r_3506
34	r_3959	0	0	-5.4E-05	0.00E+00	0.00E+00	-0.00012	r_3506
35	r_3960	0	5.357E-05	0	0.00E+00	1.17E-04	0.00E+00	r_3507
36	r_3961	0	0	-5.4E-05	0.00E+00	0.00E+00	-1.17E-04	r_3507
37	r_3962	0	0	-5.4E-05	0.00E+00	0.00E+00	-0.00012	r_4039
38	r_3973	7.14E-05	7.144E-05	7.14E-05	7.69E-05	7.69E-05	7.69E-05	r_4042
39	r_3987	3.43E-05	3.431E-05	3.43E-05	3.70E-05	3.70E-05	3.70E-05	r_4045
40	r_3996	0.000253	0.0002534	0.000253	2.73E-04	2.73E-04	2.73E-04	
41	r_4005	6.13E-05	6.132E-05	6.13E-05	6.6E-05	6.6E-05	6.6E-05	
42	r_4038	6.87E-05	6.871E-05	6.87E-05	7.4E-05	7.4E-05	7.4E-05	
43	r_4040	8.8E-08	8.798E-08	8.8E-08	9.48E-08	9.48E-08	9.48E-08	
44	r_4043	0	0	0	0	0	0	
45	r_4044	0	0	0	0.00E+00	0.00E+00	0	
46	r_4041	0.08798	0.0879802	0.08798	0.094757	0.094757	0.094756	
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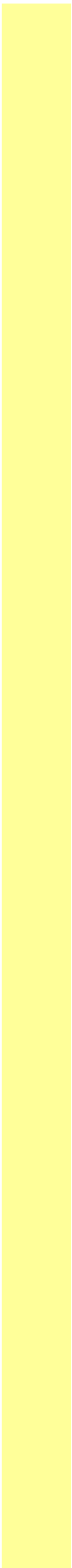
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Gene ID	Gene Name	Comparable fluxes				
		Rxn ID	Y7.Fe diff within	Y7.6 diff within	diff between	
e_0151	DLD1					
e_0255	CYC7	r_0001	1.92E-05	6.84E-05	0.00E+00	
e_0268	DLD3	r_0002	1.92E-05	6.84E-05	0.00E+00	
e_0531	CYC1	r_0003	2.41E-06	8.59E-06	0.00E+00	
e_0152	DLD2	r_0004	1.63E-05	5.79E-05	0.00E+00	
e_0256	CYC7	r_0005	2.05E-07	7.85E-07	7.69E-03	
e_0532	CYC1	r_0006	2.05E-07	7.85E-07	7.69E-03	
e_0015	BDH1	r_0007	1.72E-06	6.13E-06	4.49E-04	
e_0255	CYC7	r_0012	2.91E-05	1.04E-04	0.00E+00	
e_0531	CYC1	r_0013	1.34E-06	4.77E-06	0.00E+00	
e_0704	CYB2	r_0014	1.47E-10	6.85E-10	6.71E-06	
e_0364	GSC2	r_0015	1.47E-10	6.85E-10	6.71E-06	
e_0682	FKS1	r_0016	1.69E-06	6.00E-06	1.31E-03	
e_0379	SKN1	r_0017	0.00E+00	0.00E+00	0.00E+00	
e_0973	KRE6	r_0018	1.56E-06	5.57E-06	1.94E-03	
e_0465	HIS6	r_0019	9.33E-07	3.32E-06	0.00E+00	
e_0431	PUT2	r_0020	1.94E-04	6.89E-04	1.33E-02	
e_0254	UTR4	r_0021	0.00E+00	0.00E+00	0.00E+00	
e_0721	ADI1	r_0022	0.00E+00	0.00E+00	0.00E+00	
e_0832	RIB2	r_0023	1.81E-06	6.44E-06	2.01E-03	
e_0071	RIB7	r_0024	4.57E-05	1.63E-04	0.00E+00	
e_0100	ILV6	r_0025	4.75E-05	1.69E-04	2.01E-03	
e_0734	ILV2	r_0026	1.34E-06	4.77E-06	0.00E+00	
e_0794	FOL1	r_0027	1.56E-06	5.57E-06	1.94E-03	
e_0348	ARO8	r_0028	0.00E+00	0.00E+00	0.00E+00	
e_0496	BNA3	r_0029	1.92E-04	6.84E-04	0.00E+00	
e_0980	YER152C	r_0030	1.94E-04	6.90E-04	2.01E-03	
e_0437	PAN5	r_0032	1.59E-05	5.66E-05	3.88E-04	
e_0170	ARO3	r_0033	2.74E-05	9.77E-05	0.00E+00	
e_0191	COQ4	r_0034	0.00E+00	0.00E+00	0.00E+00	
e_0339	COQ8	r_0035	0.00E+00	0.00E+00	0.00E+00	
e_0406	COQ6	r_0036	0.00E+00	0.00E+00	0.00E+00	
e_0660	COQ9	r_0037	0.00E+00	0.00E+00	0.00E+00	
e_0713	COQ5	r_0038	3.57E-10	1.37E-09	1.34E-05	
e_0835	COQ3	r_0039	1.52E-06	5.43E-06	1.33E-02	
e_0858	CAT5	r_0040	1.52E-06	5.43E-06	1.33E-02	
e_0191	COQ4	r_0041	1.21E-06	2.94E-06	2.92E-06	
e_0339	COQ8	r_0042	1.92E-04	6.84E-04	0.00E+00	
e_0406	COQ6	r_0043	0.00E+00	0.00E+00	0.00E+00	
e_0660	COQ9	r_0044	0.00E+00	0.00E+00	0.00E+00	
e_0713	COQ5	r_0045	4.08E-07	0.00E+00	1.51E-02	
e_0835	COQ3	r_0057	1.08E-05	3.84E-05	0.00E+00	
e_0858	CAT5	r_0058	4.08E-07	0.00E+00	1.51E-02	
e_0328	LEU1	r_0059	0.00E+00	0.00E+00	0.00E+00	
e_0778	LEU4	r_0060	1.81E-06	6.44E-06	2.01E-03	
e_0855	LEU9	r_0061	1.81E-06	6.44E-06	2.01E-03	
e_0779	LEU4	r_0062	2.36E-06	8.40E-06	0.00E+00	
e_0196	LYS4	r_0063	9.33E-07	3.32E-06	0.00E+00	
e_0947	CIT3	r_0064	1.69E-06	6.00E-06	0.00E+00	

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2	e_0550	BAT2	r_0065	1.52E-06	5.43E-06	1.33E-02
3	e_0457	BAT1	r_0066	1.52E-06	5.43E-06	0.00E+00
4	e_0830	MET22	r_0067	1.52E-06	5.43E-06	0.00E+00
5	e_0354	PDE1	r_0068	4.57E-05	1.63E-04	0.00E+00
6	e_0897	PDE2	r_0069	0.00E+00	0.00E+00	0.00E+00
7	e_0897	PDE2	r_0070	0.00E+00	0.00E+00	0.00E+00
8	e_0897	PDE2	r_0072	1.81E-06	6.44E-06	0.00E+00
9	e_0897	PDE2	r_0073	4.80E-05	1.71E-04	0.00E+00
10	e_0897	PDE2	r_0074	4.80E-05	1.71E-04	0.00E+00
11	e_0237	RIB3	r_0075	1.34E-06	4.77E-06	0.00E+00
12	e_0182	ARO1	r_0076	4.80E-05	1.71E-04	0.00E+00
13	e_0182	ARO1	r_0077	4.80E-05	1.71E-04	0.00E+00
14	e_0092	TSC10	r_0078	4.80E-05	1.71E-04	0.00E+00
15	e_0088	ARO4	r_0079	2.35E-06	8.38E-06	1.45E-02
16	e_0169	ARO3	r_0080	1.61E-05	5.40E-05	4.77E-04
17	e_0663	BNA5	r_0081	1.44E-12	5.54E-12	5.42E-08
18	e_0598	FOX2	r_0082	4.80E-05	1.71E-04	0.00E+00
19	e_0530	BNA1	r_0083	4.80E-05	1.71E-04	0.00E+00
20	e_0305	TMT1	r_0084	0.00E+00	0.00E+00	0.00E+00
21	e_0328	LEU1	r_0085	0.00E+00	0.00E+00	0.00E+00
22	e_0101	LEU2	r_0086	1.34E-06	4.77E-06	0.00E+00
23	e_0370	PDC6	r_0087	1.34E-06	4.77E-06	0.00E+00
24	e_0636	PDC1	r_0088	4.80E-05	1.71E-04	0.00E+00
25	e_0647	PDC5	r_0089	7.20E-05	2.56E-04	0.00E+00
26	e_0075	ECM31	r_0090	4.80E-05	1.71E-04	0.00E+00
27	e_0138	THI3	r_0091	2.40E-04	8.54E-04	6.26E-03
28	e_0370	PDC6	r_0092	4.80E-05	1.71E-04	0.00E+00
29	e_0636	PDC1	r_0093	4.80E-05	1.71E-04	0.00E+00
30	e_0647	PDC5	r_0094	0.00E+00	0.00E+00	0.00E+00
31	e_0182	ARO1	r_0095	2.41E-06	8.59E-06	0.00E+00
32	e_0810	ABZ1	r_0096	2.36E-06	8.40E-06	3.80E-03
33	e_0759	ABZ2	r_0097	2.36E-06	8.40E-06	3.80E-03
34	e_0361	UGA1	r_0099	0.00E+00	0.00E+00	0.00E+00
35	e_0122	THR4	r_0100	1.08E-05	3.84E-05	0.00E+00
36	e_0138	THI3	r_0101	2.34E-06	8.32E-06	0.00E+00
37	e_0691	VIP1	r_0102	1.33E-05	4.52E-05	0.00E+00
38	e_0866	DDP1	r_0103	1.32E-05	4.68E-05	0.00E+00
39	e_0166	KCS1	r_0104	3.31E-05	7.27E-05	2.79E-04
40	e_0627	MEU1	r_0105	1.08E-05	3.84E-05	0.00E+00
41	e_0350	SDT1	r_0106	1.49E-06	5.31E-06	0.00E+00
42	e_1053	melibiose	r_0107	1.49E-06	5.31E-06	0.00E+00
43	e_0865	ISN1	r_0108	0.00E+00	0.00E+00	0.00E+00
44	e_0350	SDT1	r_0109	7.30E-05	1.39E-04	1.08E-03
45	e_1053	melibiose	r_0111	3.20E-05	1.14E-04	0.00E+00
46	e_0368	ADE6	r_0112	1.09E-04	2.77E-04	1.62E-03
47	e_0340	MET13	r_0113	4.84E-05	1.71E-04	0.00E+00
48	e_0903	MET12	r_0114	0.00E+00	0.00E+00	0.00E+00
49	e_0195	HEM1	r_0115	2.21E-04	7.87E-04	2.21E-03
50	e_0866	DDP1	r_0116	0.00E+00	0.00E+00	0.00E+00
51	e_0166	KCS1	r_0117	0.00E+00	0.00E+00	0.00E+00
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2	e_0307	FAU1	r_0118	2.21E-04	7.87E-04	2.21E-03
3	e_0298	MET6	r_0119	1.48E-05	5.26E-05	0.00E+00
4	e_0691	VIP1	r_0120	1.49E-06	5.31E-06	0.00E+00
5	e_0691	VIP1	r_0121	1.49E-06	5.31E-06	0.00E+00
6	e_0474	PFK26	r_0122	2.34E-06	8.32E-06	0.00E+00
7	e_0839	PFK27	r_0123	1.33E-05	4.52E-05	0.00E+00
8	e_0404	SOL4	r_0124	1.08E-05	3.84E-05	0.00E+00
9	e_0453	SOL3	r_0125	1.08E-05	3.84E-05	0.00E+00
10	e_0691	VIP1	r_0126	2.74E-05	9.77E-05	0.00E+00
11	e_0866	DDP1	r_0127	9.89E-05	1.75E-04	5.50E-06
12	e_0166	KCS1	r_0128	2.74E-05	9.77E-05	0.00E+00
13	e_0370	PDC6	r_0129	2.74E-05	9.77E-05	0.00E+00
14	e_0636	PDC1	r_0130	2.74E-05	9.77E-05	0.00E+00
15	e_0647	PDC5	r_0131	2.74E-05	9.77E-05	0.00E+00
16	e_0685	ILV5	r_0132	8.18E-05	1.56E-04	0.00E+00
17	e_0100	ILV6	r_0133	2.74E-05	9.77E-05	0.00E+00
18	e_0734	ILV2	r_0134	2.74E-05	9.77E-05	0.00E+00
19	e_0481	POT1	r_0135	2.74E-05	9.77E-05	0.00E+00
20	e_0481	POT1	r_0137	0.00E+00	0.00E+00	0.00E+00
21	e_0481	POT1	r_0138	1.31E-06	4.68E-06	0.00E+00
22	e_0904	ERG10	r_0139	1.34E-06	4.77E-06	0.00E+00
23	e_0905	ERG10	r_0140	3.31E-05	1.18E-04	0.00E+00
24	e_0481	POT1	r_0142	8.11E-05	2.89E-04	1.34E-04
25	e_0481	POT1	r_0143	3.31E-05	1.18E-04	0.00E+00
26	e_0481	POT1	r_0144	2.96E-05	1.05E-04	1.34E-04
27	e_0744	HFA1	r_0145	1.34E-06	4.77E-06	0.00E+00
28	e_0147	BPL1	r_0146	0.00E+00	0.00E+00	0.00E+00
29	e_0808	ACC1	r_0147	2.74E-05	9.77E-05	0.00E+00
30	e_0023	ACH1	r_0148	1.06E-04	2.73E-04	4.19E-02
31	e_0013	ACS1	r_0149	4.84E-05	1.71E-04	0.00E+00
32	e_0651	ACS2	r_0150	3.87E-05	1.37E-04	0.00E+00
33	e_0014	ACS1	r_0151	2.35E-06	8.38E-06	1.45E-02
34	e_0652	ACS2	r_0152	3.31E-05	1.18E-04	1.43E-02
35	e_0290	ARG5,6	r_0153	3.31E-05	1.18E-04	1.43E-02
36	e_0019	PHO11	r_0154	1.22E-05	4.33E-05	3.88E-04
37	e_0060	PHO5	r_0155	0.00E+00	0.00E+00	0.00E+00
38	e_0948	PDH1	r_0156	6.86E-05	2.44E-04	0.00E+00
39	e_0840	ARG8	r_0157	8.28E-08	3.18E-07	3.11E-03
40	e_0925	PPT2	r_0158	1.23E-06	4.38E-06	0.00E+00
41	e_0349	POX1	r_0159	2.74E-05	9.77E-05	0.00E+00
42	e_0349	POX1	r_0160	2.74E-05	9.77E-05	0.00E+00
43	e_0349	POX1	r_0161	2.74E-05	9.77E-05	0.00E+00
44	e_0349	POX1	r_0162	9.57E-07	3.40E-06	0.00E+00
45	e_0349	POX1	r_0163	1.00E+03	1.00E+03	8.68E-01
46	e_0349	POX1	r_0164	0.00E+00	0.00E+00	0.00E+00
47	e_1010	ARE1	r_0165	1.00E+03	1.00E+03	8.68E-01
48	e_1009	ARE2	r_0166	1.60E-06	5.70E-06	0.00E+00
49	e_1010	ARE1	r_0167	1.60E-06	5.70E-06	0.00E+00
50	e_1010	ARE1	r_0168	1.58E-06	5.61E-06	0.00E+00
51	e_1010	ARE1	r_0169	1.17E-06	4.15E-06	0.00E+00
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2	e_1010	ARE1	r_0170	1.17E-06	4.15E-06	0.00E+00
3	e_1010	ARE1	r_0171	1.15E-06	4.10E-06	0.00E+00
4	e_1009	ARE2	r_0172	9.33E-07	3.32E-06	0.00E+00
5	e_1010	ARE1	r_0173	1.52E-04	5.43E-04	1.23E-03
6	e_1010	ARE1	r_0174	3.20E-05	1.14E-04	0.00E+00
7	e_1010	ARE1	r_0175	3.69E-05	1.31E-04	0.00E+00
8	e_1010	ARE1	r_0176	0.00E+00	0.00E+00	0.00E+00
9	e_0500	GWT1	r_0177	0.00E+00	0.00E+00	0.00E+00
10	e_0786	AAH1	r_0178	0.00E+00	0.00E+00	0.00E+00
11	e_0700	APT1	r_0179	1.71E-06	6.09E-06	0.00E+00
12	e_0786	AAH1	r_0180	1.71E-06	6.09E-06	0.00E+00
13	e_0541	ADO1	r_0181	1.69E-06	6.00E-06	0.00E+00
14	e_0701	AMD1	r_0182	2.20E-06	7.82E-06	0.00E+00
15	e_0280	SAH1	r_0183	2.20E-06	7.82E-06	0.00E+00
16	e_0824	SPE2	r_0184	2.15E-06	7.66E-06	0.00E+00
17	e_0816	BIO3	r_0185	0.00E+00	0.00E+00	0.00E+00
18	e_0491	CYR1	r_0186	9.37E-07	3.33E-06	0.00E+00
19	e_0194	ADK1	r_0187	9.37E-07	3.33E-06	0.00E+00
20	e_0303	ADK2	r_0188	0.00E+00	0.00E+00	0.00E+00
21	e_0303	ADK2	r_0189	0.00E+00	0.00E+00	0.00E+00
22	e_0686	ADE13	r_0190	0.00E+00	0.00E+00	0.00E+00
23	e_0686	ADE13	r_0191	7.75E-06	2.76E-05	0.00E+00
24	e_0791	ADE12	r_0192	0.00E+00	0.00E+00	0.00E+00
25	e_0556	MET14	r_0193	1.75E-05	6.21E-05	0.00E+00
26	e_0403	CPD1	r_0194	1.75E-05	6.21E-05	0.00E+00
27	e_0313	AGX1	r_0195	1.75E-05	6.21E-05	1.59E-04
28	e_0894	ALA1	r_0198	0.00E+00	0.00E+00	0.00E+00
29	e_0386	ATF2	r_0199	0.00E+00	0.00E+00	0.00E+00
30	e_0900	ATF1	r_0200	0.00E+00	0.00E+00	0.00E+00
31	e_0386	ATF2	r_0201	0.00E+00	0.00E+00	0.00E+00
32	e_0900	ATF1	r_0202	6.36E-06	2.26E-05	1.49E-02
33	e_0386	ATF2	r_0203	9.65E-07	3.44E-06	1.49E-02
34	e_0900	ATF1	r_0204	4.80E-05	1.71E-04	0.00E+00
35	e_0386	ATF2	r_0205	0.00E+00	0.00E+00	0.00E+00
36	e_0900	ATF1	r_0206	9.24E-06	3.29E-05	0.00E+00
37	e_0386	ATF2	r_0207	9.24E-06	3.29E-05	1.09E-03
38	e_0900	ATF1	r_0208	9.24E-06	3.29E-05	1.09E-03
39	e_0764	ADH2	r_0209	2.90E-08	1.11E-07	1.09E-03
40	e_0221	YPR1	r_0210	0.00E+00	0.00E+00	0.00E+00
41	e_0447	GRE3	r_0211	1.75E-05	6.21E-05	6.89E-04
42	e_0356	ADH4	r_0212	1.84E-08	7.04E-08	6.89E-04
43	e_0730	ADH3	r_0213	0.00E+00	0.00E+00	0.00E+00
44	e_0069	ADH5	r_0214	1.00E-06	3.56E-06	7.49E-04
45	e_0149	SFA1	r_0215	2.18E-05	7.77E-05	2.95E-03
46	e_0834	ADH1	r_0216	1.00E+03	1.00E+03	2.13E-02
47	e_0356	ADH4	r_0217	1.00E+03	1.00E+03	0.00E+00
48	e_0730	ADH3	r_0218	1.30E-05	4.62E-05	0.00E+00
49	e_0126	ADH7	r_0219	2.18E-05	7.77E-05	2.95E-03
50	e_0221	YPR1	r_0220	5.37E-08	2.06E-07	2.02E-03
51	e_0766	ADH6	r_0221	0.00E+00	0.00E+00	0.00E+00
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2	e_0069	ADH5	r_0222	4.80E-05	1.71E-04	0.00E+00
3	e_0149	SFA1	r_0223	0.00E+00	0.00E+00	0.00E+00
4	e_0834	ADH1	r_0224	0.00E+00	0.00E+00	0.00E+00
5	e_0356	ADH4	r_0225	1.72E-06	6.13E-06	4.49E-04
6	e_0730	ADH3	r_0226	1.50E-04	4.00E-04	7.50E-02
7	e_0126	ADH7	r_0227	4.80E-05	1.71E-04	0.00E+00
8	e_0766	ADH6	r_0228	0.00E+00	0.00E+00	0.00E+00
9	e_0739	ALD3	r_0229	0.00E+00	0.00E+00	0.00E+00
10	e_0740	ALD2	r_0230	0.00E+00	0.00E+00	0.00E+00
11	e_0911	ALD6	r_0231	3.31E-06	4.21E-06	4.62E-05
12	e_0898	ALD4	r_0233	1.23E-05	4.38E-05	0.00E+00
13	e_0293	ALD5	r_0234	3.31E-06	4.17E-06	4.58E-05
14	e_0898	ALD4	r_0235	3.31E-06	4.17E-06	4.58E-05
15	e_0898	ALD4	r_0236	3.31E-06	4.17E-06	4.58E-05
16	e_0911	ALD6	r_0237	3.31E-06	4.17E-06	4.58E-05
17	e_0293	ALD5	r_0238	3.31E-06	4.17E-06	4.58E-05
18	e_0898	ALD4	r_0239	3.31E-06	4.17E-06	4.58E-05
19	e_0069	ADH5	r_0240	3.31E-06	4.17E-06	4.58E-05
20	e_0149	SFA1	r_0241	3.31E-06	4.17E-06	4.58E-05
21	e_0834	ADH1	r_0242	1.23E-05	4.38E-05	0.00E+00
22	e_0356	ADH4	r_0243	1.23E-05	4.38E-05	6.51E-07
23	e_0730	ADH3	r_0244	3.31E-06	4.13E-06	4.35E-05
24	e_0126	ADH7	r_0249	0.00E+00	0.00E+00	0.00E+00
25	e_0766	ADH6	r_0250	9.24E-06	3.29E-05	1.84E-03
26	e_0069	ADH5	r_0252	3.69E-05	1.31E-04	0.00E+00
27	e_0149	SFA1	r_0253	1.24E-05	4.34E-05	0.00E+00
28	e_0834	ADH1	r_0254	3.69E-05	1.31E-04	0.00E+00
29	e_0356	ADH4	r_0255	4.67E-07	1.66E-06	0.00E+00
30	e_0730	ADH3	r_0256	6.64E-06	2.26E-05	0.00E+00
31	e_0126	ADH7	r_0259	2.46E-05	4.17E-05	0.00E+00
32	e_0766	ADH6	r_0260	2.46E-05	4.17E-05	0.00E+00
33	e_0739	ALD3	r_0261	2.46E-05	4.17E-05	0.00E+00
34	e_0740	ALD2	r_0262	1.18E-05	3.96E-05	0.00E+00
35	e_0069	ADH5	r_0263	2.74E-05	9.77E-05	0.00E+00
36	e_0149	SFA1	r_0264	2.74E-05	9.77E-05	0.00E+00
37	e_0834	ADH1	r_0265	2.74E-05	9.77E-05	0.00E+00
38	e_0356	ADH4	r_0266	2.74E-05	9.77E-05	0.00E+00
39	e_0730	ADH3	r_0267	1.23E-05	4.09E-05	0.00E+00
40	e_0235	PHO8	r_0268	7.96E-06	2.83E-05	0.00E+00
41	e_0486	DAL2	r_0269	8.21E-06	2.92E-05	0.00E+00
42	e_0484	DAL1	r_0270	6.02E-06	2.14E-05	0.00E+00
43	e_0082	DUR1,2	r_0271	0.00E+00	0.00E+00	0.00E+00
44	e_0080	KTR4	r_0272	0.00E+00	0.00E+00	6.78E-09
45	e_0081	KTR3	r_0273	4.22E-05	1.14E-04	0.00E+00
46	e_0236	KRE2	r_0274	4.22E-05	1.14E-04	0.00E+00
47	e_0511	YUR1	r_0278	1.21E-06	4.30E-06	1.60E-03
48	e_0604	KTR2	r_0279	1.52E-06	5.43E-06	1.33E-02
49	e_0770	KTR5	r_0280	2.00E+03	2.00E+03	7.31E-03
50	e_0853	KTR1	r_0281	0.00E+00	0.00E+00	0.00E+00
51	e_0908	KTR6	r_0282	0.00E+00	0.00E+00	0.00E+00
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2	e_0952	ATH1	r_0283	0.00E+00	0.00E+00	0.00E+00
3	e_0164	NTH1	r_0284	0.00E+00	0.00E+00	0.00E+00
4	e_0065	TPS1	r_0285	0.00E+00	0.00E+00	0.00E+00
5	e_0179	TPS2	r_0286	0.00E+00	0.00E+00	0.00E+00
6	e_0711	TSL1	r_0287	0.00E+00	0.00E+00	0.00E+00
7	e_0753	TPS3	r_0288	0.00E+00	0.00E+00	0.00E+00
8	e_0098	MAL32	r_0289	0.00E+00	0.00E+00	0.00E+00
9	e_0414	IMA1	r_0290	0.00E+00	0.00E+00	0.00E+00
10	e_0416	MAL12	r_0291	0.00E+00	0.00E+00	0.00E+00
11	e_0483	IMA3	r_0292	0.00E+00	0.00E+00	0.00E+00
12	e_0521	IMA5	r_0293	0.00E+00	0.00E+00	0.00E+00
13	e_0523	IMA4	r_0294	0.00E+00	0.00E+00	0.00E+00
14	e_0760	HER2	r_0295	0.00E+00	0.00E+00	0.00E+00
15	e_0898	ALD4	r_0296	0.00E+00	0.00E+00	0.00E+00
16	e_0219	TRP4	r_0297	0.00E+00	0.00E+00	0.00E+00
17	e_0297	TRP2	r_0298	0.00E+00	0.00E+00	0.00E+00
18	e_0591	TRP3	r_0299	0.00E+00	0.00E+00	0.00E+00
19	e_0210	HNT2	r_0300	1.10E-04	3.89E-04	6.90E-03
20	e_0447	GRE3	r_0301	1.33E-05	4.61E-05	0.00E+00
21	e_0921	CAR1	r_0302	2.00E+03	2.00E+03	7.31E-03
22	e_0426	ARG4	r_0303	2.00E+03	2.00E+03	4.09E-04
23	e_0826	ARG1	r_0304	0.00E+00	0.00E+00	6.78E-09
24	e_0214	YDR341C	r_0306	4.80E-05	1.71E-04	0.00E+00
25	e_0443	MSR1	r_0307	1.11E-04	3.09E-04	3.43E-04
26	e_0376	ASN2	r_0308	3.31E-05	1.18E-04	0.00E+00
27	e_0970	ASN1	r_0309	8.11E-05	2.89E-04	4.47E-05
28	e_0427	DED81	r_0310	1.12E-04	3.99E-04	4.47E-05
29	e_0114	SLM5	r_0311	6.40E-05	2.28E-04	0.00E+00
30	e_0508	URA2	r_0312	4.80E-05	1.71E-04	0.00E+00
31	e_0281	HOM3	r_0313	1.19E-09	4.57E-09	4.47E-05
32	e_0629	AAT2	r_0314	1.28E-05	4.56E-05	0.00E+00
33	e_0574	AAT1	r_0315	4.80E-05	1.71E-04	0.00E+00
34	e_0630	AAT2	r_0317	3.31E-06	4.21E-06	4.62E-05
35	e_0186	HOM2	r_0318	1.28E-05	4.56E-05	0.00E+00
36	e_0615	DPS1	r_0319	0.00E+00	0.00E+00	0.00E+00
37	e_0919	MSD1	r_0320	0.00E+00	0.00E+00	0.00E+00
38	e_0244	APA2	r_0321	0.00E+00	0.00E+00	0.00E+00
39	e_0107	APA1	r_0322	0.00E+00	0.00E+00	0.00E+00
40	e_0107	APA1	r_0323	0.00E+00	0.00E+00	0.00E+00
41	e_0283	HIS1	r_0326	9.94E-05	2.68E-04	2.43E-05
42	e_0002	ATP8	r_0327	4.22E-05	1.14E-04	0.00E+00
43	e_0003	ATP6	r_0328	0.00E+00	0.00E+00	0.00E+00
44	e_0005	OLI1	r_0329	4.80E-05	1.71E-04	0.00E+00
45	e_0033	ATP1	r_0330	4.80E-05	1.71E-04	1.63E-05
46	e_0051	ATP3	r_0331	0.00E+00	0.00E+00	0.00E+00
47	e_0127	ATP16	r_0332	0.00E+00	0.00E+00	0.00E+00
48	e_0207	ATP5	r_0334	0.00E+00	0.00E+00	0.00E+00
49	e_0213	TIM11	r_0335	0.00E+00	0.00E+00	0.00E+00
50	e_0223	ATP17	r_0340	2.79E-05	9.93E-05	2.92E-06
51	e_0544	ATP2	r_0341	5.21E-05	1.39E-04	0.00E+00
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2	e_0559	ATP7	r_0342	1.00E+03	1.00E+03	0.00E+00
3	e_0671	ATP14	r_0343	1.00E+03	1.00E+03	0.00E+00
4	e_0709	ATP18	r_0344	1.00E-06	3.56E-06	2.44E-05
5	e_0913	ATP4	r_0345	0.00E+00	0.00E+00	0.00E+00
6	e_0944	ATP15	r_0346	0.00E+00	0.00E+00	0.00E+00
7	e_0950	ATP20	r_0347	0.00E+00	0.00E+00	0.00E+00
8	e_0115	PMP1	r_0348	0.00E+00	0.00E+00	0.00E+00
9	e_0248	PMP2	r_0349	1.00E-06	3.56E-06	7.49E-04
10	e_0270	YND1	r_0350	0.00E+00	0.00E+00	0.00E+00
11	e_0327	PMA1	r_0351	0.00E+00	0.00E+00	0.00E+00
12	e_0906	PMA2	r_0352	2.36E-06	8.40E-06	3.80E-03
13	e_0061	ALG1	r_0353	1.69E-06	6.00E-06	1.31E-03
14	e_0413	BIO2	r_0354	8.73E-05	3.11E-04	0.00E+00
15	e_0147	BPL1	r_0355	6.63E-06	8.47E-06	9.28E-05
16	e_0800	ERG24	r_0356	0.00E+00	0.00E+00	0.00E+00
17	e_0724	ERG5	r_0357	4.80E-05	1.71E-04	0.00E+00
18	e_0326	ERG26	r_0358	4.80E-05	1.71E-04	0.00E+00
19	e_0326	ERG26	r_0359	0.00E+00	0.00E+00	0.00E+00
20	e_0644	ERG27	r_0360	0.00E+00	0.00E+00	0.00E+00
21	e_0644	ERG27	r_0361	1.46E-07	5.59E-07	5.47E-03
22	e_0367	ERG25	r_0362	1.46E-07	5.59E-07	5.47E-03
23	e_0367	ERG25	r_0363	1.00E-06	3.56E-06	0.00E+00
24	e_0367	ERG25	r_0364	9.84E-05	2.65E-04	8.38E-08
25	e_0367	ERG25	r_0365	0.00E+00	0.00E+00	0.00E+00
26	e_0637	ERG3	r_0366	1.30E-04	4.60E-04	4.16E-02
27	e_0742	ERG2	r_0368	0.00E+00	0.00E+00	0.00E+00
28	e_0329	ERG4	r_0369	2.74E-05	9.77E-05	0.00E+00
29	e_0140	RAM1	r_0370	0.00E+00	0.00E+00	0.00E+00
30	e_0560	RAM2	r_0373	0.00E+00	0.00E+00	0.00E+00
31	e_0508	URA2	r_0399	2.81E-05	9.99E-05	0.00E+00
32	e_0542	CPA2	r_0400	4.49E-05	1.60E-04	0.00E+00
33	e_0888	CPA1	r_0402	4.49E-05	1.60E-04	0.00E+00
34	e_0018	YAT1	r_0410	2.82E-05	1.00E-04	0.00E+00
35	e_0277	YAT2	r_0412	4.49E-05	1.60E-04	0.00E+00
36	e_0703	CAT2	r_0436	0.00E+00	0.00E+00	6.78E-09
37	e_0702	CAT2	r_0437	0.00E+00	0.00E+00	0.00E+00
38	e_0371	CTT1	r_0438	2.69E-05	6.87E-05	2.70E-02
39	e_0199	CTA1	r_0439	5.38E-05	1.37E-04	5.41E-02
40	e_0206	SUR2	r_0440	0.00E+00	0.00E+00	0.00E+00
41	e_0756	SCS7	r_0441	3.81E+00	3.86E+00	8.88E-01
42	e_0206	SUR2	r_0442	1.07E-04	3.80E-04	0.00E+00
43	e_0756	SCS7	r_0443	0.00E+00	0.00E+00	0.00E+00
44	e_0417	LAG1	r_0445	2.57E-04	9.12E-04	2.45E-02
45	e_0558	LAC1	r_0446	2.57E-04	9.12E-04	3.96E-02
46	e_0762	LIP1	r_0447	9.61E-05	3.42E-04	0.00E+00
47	e_0417	LAG1	r_0448	4.80E-05	1.71E-04	0.00E+00
48	e_0558	LAC1	r_0449	4.80E-05	1.71E-04	0.00E+00
49	e_0762	LIP1	r_0450	6.08E-01	6.19E-01	6.08E-01
50	e_0417	LAG1	r_0451	1.93E-04	6.84E-04	0.00E+00
51	e_0558	LAC1	r_0452	2.61E-04	9.28E-04	2.77E-02
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2	e_0762	LIP1	r_0453	1.00E-06	3.56E-06	7.49E-04
3	e_0417	LAG1	r_0454	3.81E+00	3.86E+00	8.34E-01
4	e_0558	LAC1	r_0455	0.00E+00	0.00E+00	0.00E+00
5	e_0762	LIP1	r_0457	0.00E+00	0.00E+00	0.00E+00
6	e_0756	SCS7	r_0458	0.00E+00	0.00E+00	0.00E+00
7	e_0756	SCS7	r_0459	1.00E+03	1.00E+03	0.00E+00
8	e_0756	SCS7	r_0460	0.00E+00	0.00E+00	0.00E+00
9	e_0756	SCS7	r_0461	0.00E+00	0.00E+00	0.00E+00
10	e_0678	CDA1	r_0462	6.63E-06	8.47E-06	9.28E-05
11	e_0679	CDA2	r_0463	2.74E-05	9.77E-05	0.00E+00
12	e_0043	CHS3	r_0464	2.74E-05	9.77E-05	0.00E+00
13	e_0050	CHS2	r_0465	4.80E-05	1.71E-04	0.00E+00
14	e_0789	CHS1	r_0466	2.40E-04	8.54E-04	6.26E-03
15	e_0646	CKI1	r_0467	2.40E-04	8.54E-04	1.30E-02
16	e_0395	PCT1	r_0468	1.92E-04	6.84E-04	0.00E+00
17	e_0959	ARO7	r_0469	4.57E-05	1.63E-04	0.00E+00
18	e_0342	ARO2	r_0470	1.07E-04	3.80E-04	0.00E+00
19	e_0676	ACO1	r_0471	1.82E-04	6.46E-04	8.31E-06
20	e_0034	RER2	r_0472	8.73E-05	3.11E-04	0.00E+00
21	e_0732	SRT1	r_0473	1.92E-04	6.84E-04	0.00E+00
22	e_0034	RER2	r_0475	4.80E-05	1.71E-04	0.00E+00
23	e_0732	SRT1	r_0476	8.73E-05	3.11E-04	5.49E-02
24	e_0034	RER2	r_0477	4.80E-05	1.71E-04	6.78E-09
25	e_0732	SRT1	r_0478	1.90E-08	7.29E-08	7.14E-04
26	e_0034	RER2	r_0479	5.45E-08	2.09E-07	2.05E-03
27	e_0732	SRT1	r_0480	0.00E+00	0.00E+00	0.00E+00
28	e_0034	RER2	r_0481	8.99E-07	3.20E-06	0.00E+00
29	e_0732	SRT1	r_0482	0.00E+00	0.00E+00	0.00E+00
30	e_0034	RER2	r_0483	8.99E-07	3.20E-06	0.00E+00
31	e_0732	SRT1	r_0484	0.00E+00	0.00E+00	0.00E+00
32	e_0034	RER2	r_0485	0.00E+00	0.00E+00	0.00E+00
33	e_0732	SRT1	r_0486	8.00E-05	2.85E-04	2.76E-02
34	e_0034	RER2	r_0487	8.73E-05	3.11E-04	0.00E+00
35	e_0732	SRT1	r_0488	4.80E-05	1.71E-04	0.00E+00
36	e_0034	RER2	r_0489	8.73E-05	3.11E-04	0.00E+00
37	e_0732	SRT1	r_0490	3.81E+00	3.86E+00	8.34E-01
38	e_0034	RER2	r_0491	3.81E+00	3.86E+00	9.08E-04
39	e_0732	SRT1	r_0492	3.81E+00	3.86E+00	8.35E-01
40	e_0034	RER2	r_0497	1.13E-05	3.97E-05	0.00E+00
41	e_0732	SRT1	r_0499	2.35E-06	8.38E-06	1.45E-02
42	e_0034	RER2	r_0500	0.00E+00	0.00E+00	0.00E+00
43	e_0732	SRT1	r_0501	5.69E-01	5.81E-01	5.81E-01
44	e_0034	RER2	r_0502	2.57E-04	9.12E-04	1.16E-02
45	e_0732	SRT1	r_0503	1.29E-04	4.56E-04	1.20E-02
46	e_0034	RER2	r_0504	5.69E-01	5.81E-01	0.00E+00
47	e_0732	SRT1	r_0505	5.69E-01	5.81E-01	5.42E-08
48	e_0034	RER2	r_0506	5.69E-01	5.81E-01	5.68E-01
49	e_0732	SRT1	r_0507	5.69E-01	5.81E-01	5.68E-01
50	e_0034	RER2	r_0508	5.69E-01	5.81E-01	5.68E-01
51	e_0732	SRT1	r_0509	5.69E-01	5.81E-01	0.00E+00
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2	e_0034	RER2	r_0510	6.40E-05	2.28E-04	3.51E-03
3	e_0732	SRT1	r_0511	6.40E-05	2.28E-04	0.00E+00
4	e_0034	RER2	r_0512	5.24E-08	2.01E-07	1.97E-03
5	e_0732	SRT1	r_0514	1.07E-05	3.80E-05	3.35E-04
6	e_0034	RER2	r_0518	0.00E+00	0.00E+00	0.00E+00
7	e_0732	SRT1	r_0519	0.00E+00	0.00E+00	0.00E+00
8	e_0805	CIT1	r_0520	0.00E+00	0.00E+00	0.00E+00
9	e_0947	CIT3	r_0521	0.00E+00	0.00E+00	0.00E+00
10	e_0111	CIT2	r_0522	0.00E+00	0.00E+00	0.00E+00
11	e_0676	ACO1	r_0523	0.00E+00	0.00E+00	0.00E+00
12	e_0675	ACO1	r_0524	0.00E+00	0.00E+00	0.00E+00
13	e_0172	HEM13	r_0525	1.47E-10	6.85E-10	6.71E-06
14	e_0026	URA7	r_0526	1.07E-05	3.80E-05	0.00E+00
15	e_0540	URA8	r_0527	2.74E-05	9.77E-05	0.00E+00
16	e_0026	URA7	r_0528	3.46E-04	4.92E-04	3.21E-04
17	e_0540	URA8	r_0529	3.46E-04	4.92E-04	2.98E-04
18	e_0344	STR3	r_0530	0.00E+00	0.00E+00	6.78E-09
19	e_0380	CYS4	r_0531	0.00E+00	0.00E+00	6.78E-09
20	e_0008	CYS3	r_0532	0.00E+00	0.00E+00	0.00E+00
21	e_0545	STR2	r_0533	0.00E+00	0.00E+00	0.00E+00
22	e_0674	MET17	r_0534	3.70E-05	1.32E-04	0.00E+00
23	e_0793	YNL247W	r_0535	0.00E+00	0.00E+00	0.00E+00
24	e_0666	CDD1	r_0536	1.72E-06	6.13E-06	4.49E-04
25	e_0806	URK1	r_0537	1.72E-06	6.13E-06	4.49E-04
26	e_0424	ERG11	r_0538	1.72E-06	6.13E-06	4.49E-04
27	e_0434	NCP1	r_0539	1.20E-08	4.59E-08	4.49E-04
28	e_0960	FCY1	r_0540	0.00E+00	0.00E+00	0.00E+00
29	e_0710	ALO1	r_0541	0.00E+00	0.00E+00	0.00E+00
30	e_0726	ARA2	r_0542	1.56E-06	5.57E-06	1.94E-03
31	e_0070	ARA1	r_0543	0.00E+00	0.00E+00	0.00E+00
32	e_0567	FBA1	r_0544	1.75E-05	6.21E-05	0.00E+00
33	e_0554	SOR1	r_0545	1.56E-06	5.57E-06	1.94E-03
34	e_0452	DCD1	r_0546	1.29E-04	4.57E-04	2.95E-03
35	e_0452	DCD1	r_0547	1.07E-04	3.80E-04	0.00E+00
36	e_0786	AAH1	r_0548	1.12E-04	3.99E-04	2.56E-03
37	e_0666	CDD1	r_0549	1.12E-04	3.99E-04	3.88E-04
38	e_0234	GUK1	r_0550	8.99E-07	3.20E-06	0.00E+00
39	e_0439	DYS1	r_0551	0.00E+00	0.00E+00	0.00E+00
40	e_0119	RBK1	r_0552	8.62E-06	3.07E-05	0.00E+00
41	e_0190	CAB5	r_0553	1.92E-05	6.84E-05	0.00E+00
42	e_0815	BIO4	r_0554	0.00E+00	0.00E+00	0.00E+00
43	e_0914	YDC1	r_0555	0.00E+00	0.00E+00	0.00E+00
44	e_0914	YDC1	r_0556	1.75E-05	6.21E-05	0.00E+00
45	e_0914	YDC1	r_0557	0.00E+00	0.00E+00	6.78E-09
46	e_0914	YDC1	r_0558	1.99E-05	2.59E-05	2.79E-04
47	e_0880	DFR1	r_0559	1.32E-05	4.68E-05	0.00E+00
48	e_0881	DFR1	r_0560	3.31E-05	7.27E-05	2.79E-04
49	e_0735	FOL3	r_0561	1.75E-05	6.21E-05	0.00E+00
50	e_0794	FOL1	r_0562	2.74E-05	9.77E-05	0.00E+00
51	e_0143	GET3	r_0563	1.72E-06	6.13E-06	4.49E-04
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2	e_0692	URA4	r_0564	1.72E-06	6.13E-06	4.49E-04
3	e_0794	FOL1	r_0565	2.22E-06	7.89E-06	3.35E-04
4	e_0794	FOL1	r_0566	6.36E-06	2.26E-05	1.49E-02
5	e_0528	ILV3	r_0567	9.65E-07	3.44E-06	0.00E+00
6	e_0528	ILV3	r_0568	1.92E-04	6.84E-04	0.00E+00
7	e_0315	DAK2	r_0569	2.56E-04	9.12E-04	1.75E-02
8	e_0707	DAK1	r_0570	2.35E-06	8.38E-06	1.40E-02
9	e_0515	ERG20	r_0571	2.40E-05	8.54E-05	0.00E+00
10	e_0582	GPM1	r_0572	0.00E+00	0.00E+00	0.00E+00
11	e_0866	DDP1	r_0573	0.00E+00	0.00E+00	0.00E+00
12	e_0166	KCS1	r_0574	0.00E+00	0.00E+00	0.00E+00
13	e_0657	DPH5	r_0575	0.00E+00	0.00E+00	0.00E+00
14	e_0723	SEC59	r_0596	0.00E+00	0.00E+00	0.00E+00
15	e_0976	DPM1	r_0597	0.00E+00	0.00E+00	0.00E+00
16	e_0010	PMT2	r_0598	0.00E+00	0.00E+00	0.00E+00
17	e_0141	PMT5	r_0599	0.00E+00	0.00E+00	0.00E+00
18	e_0142	PMT1	r_0600	0.00E+00	0.00E+00	0.00E+00
19	e_0549	PMT4	r_0601	0.00E+00	0.00E+00	0.00E+00
20	e_0890	PMT3	r_0602	0.00E+00	0.00E+00	0.00E+00
21	e_0535	CDC8	r_0603	0.00E+00	0.00E+00	0.00E+00
22	e_0089	DUT1	r_0604	0.00E+00	0.00E+00	0.00E+00
23	e_0552	PGU1	r_0605	0.00E+00	0.00E+00	0.00E+00
24	e_0405	ENO1	r_0606	0.00E+00	0.00E+00	0.00E+00
25	e_0454	ENO2	r_0607	0.00E+00	0.00E+00	0.00E+00
26	e_0184	EK11	r_0608	0.00E+00	0.00E+00	0.00E+00
27	e_0646	CKI1	r_0609	0.00E+00	0.00E+00	0.00E+00
28	e_0859	IAH1	r_0610	0.00E+00	0.00E+00	0.00E+00
29	e_0200	EXG2	r_0611	0.00E+00	0.00E+00	0.00E+00
30	e_0412	BGL2	r_0612	0.00E+00	0.00E+00	0.00E+00
31	e_0673	EXG1	r_0613	0.00E+00	0.00E+00	0.00E+00
32	e_0817	DSE4	r_0614	0.00E+00	0.00E+00	0.00E+00
33	e_0873	SPR1	r_0615	0.00E+00	0.00E+00	0.00E+00
34	e_0912	BTS1	r_0616	0.00E+00	0.00E+00	0.00E+00
35	e_0273	FAA2	r_0617	0.00E+00	0.00E+00	0.00E+00
36	e_0273	FAA2	r_0618	0.00E+00	0.00E+00	0.00E+00
37	e_0273	FAA2	r_0619	0.00E+00	0.00E+00	0.00E+00
38	e_0273	FAA2	r_0620	0.00E+00	0.00E+00	0.00E+00
39	e_0273	FAA2	r_0621	0.00E+00	0.00E+00	0.00E+00
40	e_0870	HEM15	r_0622	0.00E+00	0.00E+00	0.00E+00
41	e_0256	CYC7	r_0623	0.00E+00	0.00E+00	0.00E+00
42	e_0532	CYC1	r_0624	0.00E+00	0.00E+00	0.00E+00
43	e_0605	CCP1	r_0625	0.00E+00	0.00E+00	0.00E+00
44	e_0001	COX1	r_0626	0.00E+00	0.00E+00	0.00E+00
45	e_0006	COX2	r_0627	0.00E+00	0.00E+00	0.00E+00
46	e_0007	COX3	r_0628	0.00E+00	0.00E+00	0.00E+00
47	e_0136	COX9	r_0629	0.00E+00	0.00E+00	0.00E+00
48	e_0255	CYC7	r_0630	0.00E+00	0.00E+00	0.00E+00
49	e_0346	COX4	r_0631	0.00E+00	0.00E+00	0.00E+00
50	e_0347	COX13	r_0632	0.00E+00	0.00E+00	0.00E+00
51	e_0436	COX6	r_0633	0.00E+00	0.00E+00	0.00E+00
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2	e_0475	COX5B	r_0634	0.00E+00	0.00E+00	0.00E+00
3	e_0531	CYC1	r_0635	0.00E+00	0.00E+00	0.00E+00
4	e_0632	COX12	r_0636	0.00E+00	0.00E+00	0.00E+00
5	e_0690	COX8	r_0637	0.00E+00	0.00E+00	0.00E+00
6	e_0752	COX7	r_0638	0.00E+00	0.00E+00	0.00E+00
7	e_0774	COX5A	r_0639	0.00E+00	0.00E+00	0.00E+00
8	e_0004	COB	r_0640	0.00E+00	0.00E+00	0.00E+00
9	e_0028	COR1	r_0641	0.00E+00	0.00E+00	0.00E+00
10	e_0243	QCR7	r_0642	0.00E+00	0.00E+00	0.00E+00
11	e_0250	RIP1	r_0643	0.00E+00	0.00E+00	0.00E+00
12	e_0255	CYC7	r_0644	0.00E+00	0.00E+00	0.00E+00
13	e_0322	QCR6	r_0645	0.00E+00	0.00E+00	0.00E+00
14	e_0389	QCR9	r_0646	6.12E-05	1.34E-04	0.00E+00
15	e_0422	QCR10	r_0647	6.12E-05	1.34E-04	0.00E+00
16	e_0514	QCR8	r_0648	6.12E-05	1.34E-04	3.59E-05
17	e_0531	CYC1	r_0649	6.12E-05	1.34E-04	0.00E+00
18	e_0848	CYT1	r_0650	6.12E-05	1.34E-04	0.00E+00
19	e_0978	QCR2	r_0651	6.12E-05	1.34E-04	0.00E+00
20	e_0131	FAD1	r_0652	6.12E-05	1.34E-04	0.00E+00
21	e_0626	LOT6	r_0653	6.12E-05	1.34E-04	3.33E-05
22	e_0626	LOT6	r_0654	6.12E-05	1.34E-04	0.00E+00
23	e_0149	SFA1	r_0655	6.12E-05	1.34E-04	0.00E+00
24	e_0901	FDH1	r_0656	2.74E-05	9.77E-05	0.00E+00
25	e_0396	ADE3	r_0657	2.74E-05	9.77E-05	0.00E+00
26	e_0057	MIS1	r_0658	2.40E-04	8.54E-04	0.00E+00
27	e_0513	FBP26	r_0659	4.32E-04	1.54E-03	4.09E-04
28	e_0688	FBP1	r_0661	3.01E-06	1.07E-05	0.00E+00
29	e_0567	FBA1	r_0662	6.86E-05	2.44E-04	0.00E+00
30	e_0941	FUM1	r_0663	1.00E+03	1.00E+03	1.31E-03
31	e_0940	FUM1	r_0664	1.00E+03	1.00E+03	0.00E+00
32	e_0594	URA1	r_0665	3.48E-08	1.33E-07	1.31E-03
33	e_0262	FRD1	r_0666	0.00E+00	0.00E+00	0.00E+00
34	e_0261	FRD1	r_0667	6.63E-06	8.47E-06	9.28E-05
35	e_0672	ECM38	r_0668	0.00E+00	0.00E+00	0.00E+00
36	e_0041	GAL1	r_0669	1.69E-06	6.00E-06	1.31E-03
37	e_0039	GAL7	r_0670	6.36E-06	2.26E-05	0.00E+00
38	e_0505	GSH1	r_0671	4.08E-07	0.00E+00	1.51E-02
39	e_0515	ERG20	r_0672	1.00E+03	1.00E+03	0.00E+00
40	e_0977	GDB1	r_0673	1.00E+03	1.00E+03	0.00E+00
41	e_0473	SGA1	r_0674	1.92E-04	6.84E-04	0.00E+00
42	e_0792	ZWF1	r_0675	0.00E+00	0.00E+00	0.00E+00
43	e_0079	PGI1	r_0676	0.00E+00	0.00E+00	0.00E+00
44	e_0208	PRO1	r_0678	1.56E-06	5.57E-06	1.94E-03
45	e_0751	GAD1	r_0679	1.75E-05	6.21E-05	0.00E+00
46	e_0160	GDH2	r_0680	1.75E-05	6.21E-05	0.00E+00
47	e_0016	GDH3	r_0681	0.00E+00	0.00E+00	0.00E+00
48	e_0899	GDH1	r_0682	0.00E+00	0.00E+00	0.00E+00
49	e_0150	GLT1	r_0683	0.00E+00	0.00E+00	0.00E+00
50	e_0891	PRO2	r_0687	0.00E+00	0.00E+00	0.00E+00
51	e_0955	GLN1	r_0688	1.63E-05	5.79E-05	0.00E+00
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2	e_0573	GFA1	r_0689	3.31E-05	1.18E-04	0.00E+00
3	e_0867	GLN4	r_0690	0.00E+00	0.00E+00	0.00E+00
4	e_0353	GUS1	r_0691	0.00E+00	0.00E+00	0.00E+00
5	e_0822	MSE1	r_0692	1.64E-02	1.78E-02	1.26E-03
6	e_0104	GRX1	r_0693	1.64E-02	1.78E-02	0.00E+00
7	e_0181	GRX3	r_0694	6.36E-06	2.26E-05	1.51E-02
8	e_0242	GRX2	r_0695	1.11E-06	3.96E-06	0.00E+00
9	e_0304	GRX4	r_0696	1.63E-05	5.79E-05	0.00E+00
10	e_0915	GLR1	r_0697	1.92E-05	6.84E-05	0.00E+00
11	e_0910	GRX5	r_0698	3.32E-06	4.24E-06	4.64E-05
12	e_0916	GLR1	r_0699	2.00E+03	2.00E+03	0.00E+00
13	e_0086	GPX2	r_0700	2.00E+03	2.00E+03	2.01E-03
14	e_0104	GRX1	r_0701	5.35E-08	2.05E-07	2.01E-03
15	e_0242	GRX2	r_0702	0.00E+00	0.00E+00	0.00E+00
16	e_0490	HYR1	r_0703	0.00E+00	0.00E+00	0.00E+00
17	e_0563	GPX1	r_0704	0.00E+00	0.00E+00	0.00E+00
18	e_0910	GRX5	r_0705	0.00E+00	0.00E+00	0.00E+00
19	e_0823	GSH2	r_0706	0.00E+00	0.00E+00	0.00E+00
20	e_0392	TDH3	r_0707	0.00E+00	0.00E+00	0.00E+00
21	e_0495	TDH1	r_0708	0.00E+00	0.00E+00	0.00E+00
22	e_0525	TDH2	r_0711	5.17E-08	1.98E-07	1.94E-03
23	e_1051	GCY1	r_0712	0.00E+00	0.00E+00	0.00E+00
24	e_0420	GUT1	r_0713	1.00E+03	1.00E+03	6.90E-03
25	e_0288	HOR2	r_0714	1.00E+03	1.00E+03	3.46E-02
26	e_0466	RHR2	r_0715	1.33E-05	4.52E-05	0.00E+00
27	e_0480	GUT2	r_0716	2.13E-05	7.60E-05	0.00E+00
28	e_0129	GPD1	r_0717	9.97E-06	3.55E-05	0.00E+00
29	e_0827	GPD2	r_0718	9.61E-05	3.42E-04	0.00E+00
30	e_0828	GPD2	r_0719	1.60E-04	5.70E-04	0.00E+00
31	e_0920	GDE1	r_0721	0.00E+00	0.00E+00	0.00E+00
32	e_0231	ADE8	r_0722	2.27E-06	8.06E-06	5.48E-03
33	e_0012	GCV3	r_0723	2.27E-06	8.06E-06	5.48E-03
34	e_0167	GCV1	r_0724	9.61E-05	3.42E-04	0.00E+00
35	e_0311	LPD1	r_0725	2.57E-04	9.12E-04	1.11E-02
36	e_0741	GCV2	r_0726	2.96E-05	1.05E-04	1.34E-04
37	e_0638	SHM2	r_0727	1.61E-05	5.40E-05	4.77E-04
38	e_0091	SHM1	r_0728	0.00E+00	0.00E+00	0.00E+00
39	e_0012	GCV3	r_0729	9.15E-09	3.51E-08	3.44E-04
40	e_0167	GCV1	r_0730	0.00E+00	0.00E+00	0.00E+00
41	e_0311	LPD1	r_0731	1.07E-04	3.80E-04	0.00E+00
42	e_0741	GCV2	r_0732	2.57E-04	9.12E-04	1.11E-02
43	e_0012	GCV3	r_0733	9.61E-05	3.42E-04	0.00E+00
44	e_0167	GCV1	r_0734	0.00E+00	0.00E+00	0.00E+00
45	e_0185	KGD2	r_0735	6.40E-05	2.28E-04	0.00E+00
46	e_0311	LPD1	r_0736	8.39E-05	2.53E-04	2.79E-04
47	e_0477	KGD1	r_0737	6.40E-05	2.28E-04	0.00E+00
48	e_0741	GCV2	r_0738	6.40E-05	2.28E-04	0.00E+00
49	e_0012	GCV3	r_0739	1.99E-05	2.54E-05	2.79E-04
50	e_0167	GCV1	r_0747	2.51E-05	4.24E-05	2.92E-06
51	e_0311	LPD1	r_0748	2.25E-05	4.03E-05	0.00E+00
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2	e_0741	GCV2	r_0749	2.46E-05	4.17E-05	0.00E+00
3	e_0012	GCV3	r_0750	1.18E-05	3.96E-05	0.00E+00
4	e_0167	GCV1	r_0751	2.46E-05	4.17E-05	0.00E+00
5	e_0311	LPD1	r_0752	1.18E-05	3.96E-05	0.00E+00
6	e_0741	GCV2	r_0753	1.23E-05	4.09E-05	0.00E+00
7	e_0012	GCV3	r_0754	7.96E-06	2.83E-05	0.00E+00
8	e_0167	GCV1	r_0755	8.21E-06	2.92E-05	0.00E+00
9	e_0311	LPD1	r_0756	6.02E-06	2.14E-05	0.00E+00
10	e_0741	GCV2	r_0757	6.47E-05	1.47E-04	2.44E-05
11	e_0012	GCV3	r_0758	4.67E-06	1.66E-05	2.18E-05
12	e_0167	GCV1	r_0759	2.21E-04	7.87E-04	2.21E-03
13	e_0311	LPD1	r_0760	0.00E+00	0.00E+00	6.78E-09
14	e_0741	GCV2	r_0761	0.00E+00	0.00E+00	0.00E+00
15	e_0317	GSY1	r_0762	6.36E-06	2.26E-05	1.51E-02
16	e_0510	GLG2	r_0763	5.56E-07	1.98E-06	0.00E+00
17	e_0603	GLG1	r_0764	0.00E+00	0.00E+00	0.00E+00
18	e_0667	GSY2	r_0765	1.07E-04	0.00E+00	0.00E+00
19	e_0974	GPH1	r_0766	0.00E+00	0.00E+00	0.00E+00
20	e_0064	GRS1	r_0767	0.00E+00	0.00E+00	0.00E+00
21	e_0963	GRS2	r_0768	4.08E-07	0.00E+00	1.51E-02
22	e_0746	GUA1	r_0769	0.00E+00	0.00E+00	0.00E+00
23	e_0758	GPI12	r_0770	3.81E+00	3.86E+00	0.00E+00
24	e_0108	PBN1	r_0771	1.07E-04	0.00E+00	1.51E-02
25	e_0527	GPI14	r_0772	0.00E+00	0.00E+00	0.00E+00
26	e_0583	MCD4	r_0773	3.81E+00	3.86E+00	0.00E+00
27	e_0036	GPI18	r_0774	0.00E+00	0.00E+00	0.00E+00
28	e_0341	GPI10	r_0775	0.00E+00	0.00E+00	0.00E+00
29	e_0209	GPI11	r_0781	0.00E+00	0.00E+00	0.00E+00
30	e_0618	GPI13	r_0782	0.00E+00	0.00E+00	0.00E+00
31	e_0410	FOL2	r_0783	0.00E+00	0.00E+00	0.00E+00
32	e_0025	RIB1	r_0784	0.00E+00	0.00E+00	0.00E+00
33	e_0161	GUD1	r_0785	4.08E-07	0.00E+00	1.51E-02
34	e_0226	HPT1	r_0786	4.08E-07	0.00E+00	1.51E-02
35	e_0234	GUK1	r_0787	0.00E+00	0.00E+00	0.00E+00
36	e_0234	GUK1	r_0788	4.80E-05	1.71E-04	0.00E+00
37	e_0222	ARH1	r_0789	4.80E-05	1.71E-04	0.00E+00
38	e_0301	COX15	r_0790	4.80E-05	1.71E-04	0.00E+00
39	e_0938	YAH1	r_0791	0.00E+00	0.00E+00	0.00E+00
40	e_0927	COX10	r_0792	1.20E-04	3.44E-04	2.38E-04
41	e_0191	COQ4	r_0793	1.96E-05	6.98E-05	0.00E+00
42	e_0339	COQ8	r_0795	6.40E-05	2.28E-04	0.00E+00
43	e_0406	COQ6	r_0796	3.46E-04	4.92E-04	2.98E-04
44	e_0660	COQ9	r_0797	2.74E-05	9.77E-05	0.00E+00
45	e_0713	COQ5	r_0798	4.80E-05	1.71E-04	0.00E+00
46	e_0835	COQ3	r_0799	1.00E-06	3.56E-06	0.00E+00
47	e_0858	CAT5	r_0800	6.59E-05	2.34E-04	8.85E-03
48	e_0325	HXK1	r_0801	4.80E-05	1.71E-04	0.00E+00
49	e_0355	HXK2	r_0802	0.00E+00	0.00E+00	0.00E+00
50	e_0106	GLK1	r_0803	2.74E-05	9.77E-05	0.00E+00
51	e_0325	HXK1	r_0804	4.80E-05	1.71E-04	0.00E+00
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2	e_0355	HXK2	r_0805	4.80E-05	1.71E-04	0.00E+00
3	e_0325	HXK1	r_0806	7.38E-05	1.99E-04	0.00E+00
4	e_0355	HXK2	r_0807	4.80E-05	1.71E-04	0.00E+00
5	e_0103	HIS4	r_0810	0.00E+00	0.00E+00	0.00E+00
6	e_0320	HIS2	r_0811	6.40E-05	2.28E-04	1.94E-02
7	e_0476	HIS5	r_0812	0.00E+00	0.00E+00	0.00E+00
8	e_0953	HTS1	r_0813	4.82E-05	1.79E-04	3.88E-04
9	e_0954	HTS1	r_0815	0.00E+00	0.00E+00	0.00E+00
10	e_0047	HMT1	r_0816	9.24E-06	3.29E-05	1.09E-03
11	e_0196	LYS4	r_0817	2.11E-06	7.50E-06	0.00E+00
12	e_0146	LYS21	r_0818	2.21E-04	7.87E-04	2.21E-03
13	e_0154	LYS20	r_0819	2.21E-04	7.87E-04	1.12E-03
14	e_0625	MHT1	r_0820	1.00E-06	3.56E-06	7.49E-04
15	e_0945	SAM4	r_0821	1.00E-06	3.56E-06	7.49E-04
16	e_0472	LYS12	r_0831	9.68E-05	3.43E-04	5.42E-08
17	e_0548	HOM6	r_0832	9.68E-05	3.43E-04	5.42E-08
18	e_0548	HOM6	r_0841	1.48E-05	5.26E-05	0.00E+00
19	e_0428	THR1	r_0842	0.00E+00	0.00E+00	0.00E+00
20	e_0799	MET2	r_0843	9.33E-07	3.32E-06	0.00E+00
21	e_0233	TSA2	r_0844	2.74E-05	9.77E-05	0.00E+00
22	e_0398	TRX2	r_0845	2.74E-05	9.77E-05	0.00E+00
23	e_0029	PRX1	r_0847	2.74E-05	9.77E-05	0.00E+00
24	e_0124	TRX3	r_0848	2.74E-05	9.77E-05	0.00E+00
25	e_0400	TRX2	r_0849	2.74E-05	9.77E-05	0.00E+00
26	e_0645	AHP1	r_0850	2.74E-05	9.77E-05	0.00E+00
27	e_0202	GLO2	r_0851	2.00E+03	2.00E+03	1.91E-02
28	e_0846	GLO4	r_0852	2.42E-08	9.27E-08	9.07E-04
29	e_0811	COQ2	r_0853	0.00E+00	0.00E+00	0.00E+00
30	e_0933	THI6	r_0854	1.21E-06	4.30E-06	0.00E+00
31	e_0158	HEM3	r_0855	2.35E-06	8.38E-06	1.45E-02
32	e_0697	HMG2	r_0882	0.00E+00	0.00E+00	6.78E-09
33	e_0708	HMG1	r_0883	1.22E-05	4.33E-05	3.88E-04
34	e_0716	ERG13	r_0884	4.80E-05	1.71E-04	0.00E+00
35	e_0717	ERG13	r_0885	0.00E+00	0.00E+00	0.00E+00
36	e_0825	THI20	r_0886	6.08E-01	6.19E-01	6.08E-01
37	e_0939	THI21	r_0887	6.08E-01	6.19E-01	6.19E-01
38	e_0966	THI22	r_0888	2.74E-05	9.77E-05	1.91E-02
39	e_0226	HPT1	r_0889	2.40E-04	8.54E-04	6.26E-03
40	e_0087	HIS7	r_0890	0.00E+00	0.00E+00	0.00E+00
41	e_0875	HIS3	r_0891	1.29E-04	4.56E-04	1.40E-02
42	e_0458	IMD2	r_0892	8.00E-05	2.85E-04	2.76E-02
43	e_0693	IMD3	r_0893	1.30E-04	4.60E-04	4.16E-02
44	e_0705	IMD4	r_0902	2.27E-06	8.06E-06	5.48E-03
45	e_0591	TRP3	r_0903	1.75E-05	6.21E-05	0.00E+00
46	e_0370	PDC6	r_0904	1.99E-05	2.54E-05	2.79E-04
47	e_0636	PDC1	r_0905	0.00E+00	0.00E+00	0.00E+00
48	e_0647	PDC5	r_0906	0.00E+00	0.00E+00	0.00E+00
49	e_0038	IPP1	r_0907	7.55E-05	2.69E-04	0.00E+00
50	e_0754	PPA2	r_0908	2.35E-06	8.38E-06	1.45E-02
51	e_0631	ADE16	r_0909	1.72E-06	6.13E-06	4.49E-04
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2	e_0736	ADE17	r_0910	1.72E-06	6.13E-06	4.49E-04
3	e_0211	IPK1	r_0911	2.35E-06	8.38E-06	1.45E-02
4	e_0187	ARG82	r_0912	2.35E-06	8.38E-06	1.40E-02
5	e_0187	ARG82	r_0913	6.36E-06	2.26E-05	1.49E-02
6	e_0187	ARG82	r_0914	2.35E-06	8.38E-06	1.45E-02
7	e_0187	ARG82	r_0915	2.35E-06	8.38E-06	1.45E-02
8	e_0274	ISC1	r_0916	2.74E-05	9.77E-05	4.33E-02
9	e_0274	ISC1	r_0917	1.29E-04	4.56E-04	1.40E-02
10	e_0274	ISC1	r_0918	1.29E-04	4.56E-04	1.40E-02
11	e_0274	ISC1	r_0919	1.00E+03	1.00E+03	0.00E+00
12	e_0274	ISC1	r_0920	1.00E+03	1.00E+03	0.00E+00
13	e_0274	ISC1	r_0921	0.00E+00	0.00E+00	0.00E+00
14	e_0274	ISC1	r_0922	2.46E-05	4.17E-05	0.00E+00
15	e_0274	ISC1	r_0929	0.00E+00	0.00E+00	0.00E+00
16	e_0274	ISC1	r_0935	7.22E-13	2.77E-12	2.71E-08
17	e_0274	ISC1	r_0936	0.00E+00	0.00E+00	0.00E+00
18	e_0274	ISC1	r_0937	9.33E-07	3.32E-06	0.00E+00
19	e_0274	ISC1	r_0938	1.21E-06	4.30E-06	9.07E-04
20	e_0274	ISC1	r_0939	1.21E-06	4.30E-06	6.91E-04
21	e_0274	ISC1	r_0940	2.91E-05	1.04E-04	0.00E+00
22	e_0274	ISC1	r_0941	2.97E-08	1.14E-07	1.12E-03
23	e_0274	ISC1	r_0942	0.00E+00	0.00E+00	3.39E-09
24	e_0274	ISC1	r_0943	0.00E+00	0.00E+00	0.00E+00
25	e_0274	ISC1	r_0949	2.74E-05	9.77E-05	0.00E+00
26	e_0274	ISC1	r_0950	0.00E+00	0.00E+00	0.00E+00
27	e_0274	ISC1	r_0951	2.88E-05	1.02E-04	0.00E+00
28	e_0275	ISC1	r_0953	0.00E+00	0.00E+00	0.00E+00
29	e_0275	ISC1	r_0954	0.00E+00	0.00E+00	0.00E+00
30	e_0275	ISC1	r_0955	0.00E+00	0.00E+00	0.00E+00
31	e_0275	ISC1	r_0956	0.00E+00	0.00E+00	0.00E+00
32	e_0275	ISC1	r_0957	2.91E-05	1.04E-04	1.12E-03
33	e_0275	ISC1	r_0958	1.81E-04	6.46E-04	1.33E-02
34	e_0275	ISC1	r_0959	9.69E-05	2.72E-04	1.23E-03
35	e_0275	ISC1	r_0960	2.41E-06	8.59E-06	0.00E+00
36	e_0275	ISC1	r_0961	1.42E-04	5.05E-04	1.17E-02
37	e_0275	ISC1	r_0962	1.30E-04	4.60E-04	6.83E-02
38	e_0275	ISC1	r_0963	0.00E+00	0.00E+00	0.00E+00
39	e_0275	ISC1	r_0965	0.00E+00	0.00E+00	0.00E+00
40	e_0275	ISC1	r_0966	0.00E+00	0.00E+00	0.00E+00
41	e_0275	ISC1	r_0967	3.57E-10	1.37E-09	1.34E-05
42	e_0275	ISC1	r_0968	1.47E-10	6.85E-10	6.71E-06
43	e_0275	ISC1	r_0969	4.80E-05	1.71E-04	0.00E+00
44	e_0275	ISC1	r_0970	3.17E-04	3.41E-04	0.00E+00
45	e_0275	ISC1	r_0971	4.22E-05	1.14E-04	0.00E+00
46	e_0275	ISC1	r_0972	4.80E-05	1.71E-04	0.00E+00
47	e_0275	ISC1	r_0973	9.84E-05	2.65E-04	8.38E-08
48	e_0275	ISC1	r_0974	3.17E-04	3.41E-04	2.44E-05
49	e_0275	ISC1	r_0975	0.00E+00	0.00E+00	0.00E+00
50	e_0275	ISC1	r_0976	9.94E-05	2.68E-04	4.06E-05
51	e_0275	ISC1	r_0977	0.00E+00	0.00E+00	0.00E+00
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2	e_0275	ISC1	r_0978	4.80E-05	1.71E-04	1.63E-05
3	e_0275	ISC1	r_0979	0.00E+00	0.00E+00	0.00E+00
4	e_0275	ISC1	r_0982	8.00E-05	2.85E-04	3.54E-02
5	e_0275	ISC1	r_0983	0.00E+00	0.00E+00	0.00E+00
6	e_0275	ISC1	r_0984	1.60E-04	5.70E-04	2.91E-02
7	e_0275	ISC1	r_0985	0.00E+00	0.00E+00	0.00E+00
8	e_0274	ISC1	r_0986	1.23E-05	4.38E-05	1.42E-06
9	e_0274	ISC1	r_0987	0.00E+00	0.00E+00	0.00E+00
10	e_0274	ISC1	r_0988	1.56E-06	5.57E-06	1.94E-03
11	e_0274	ISC1	r_0989	1.56E-06	5.57E-06	1.94E-03
12	e_0274	ISC1	r_0990	6.08E-01	6.19E-01	6.19E-01
13	e_0274	ISC1	r_0992	4.80E-05	1.71E-04	0.00E+00
14	e_0274	ISC1	r_0993	1.21E-06	2.94E-06	2.92E-06
15	e_0274	ISC1	r_0995	3.35E-08	1.28E-07	1.26E-03
16	e_0274	ISC1	r_0996	1.52E-06	5.43E-06	1.33E-02
17	e_0274	ISC1	r_0997	1.52E-06	5.43E-06	1.33E-02
18	e_0274	ISC1	r_0998	0.00E+00	0.00E+00	0.00E+00
19	e_0859	IAH1	r_0999	0.00E+00	0.00E+00	0.00E+00
20	e_0859	IAH1	r_1000	3.81E+00	3.86E+00	8.88E-01
21	e_0771	IDH1	r_1001	1.02E-06	3.62E-06	0.00E+00
22	e_0862	IDH2	r_1002	9.33E-07	3.32E-06	0.00E+00
23	e_0984	IDP2	r_1003	0.00E+00	0.00E+00	0.00E+00
24	e_0769	IDP3	r_1004	4.80E-05	1.71E-04	0.00E+00
25	e_0289	ICL1	r_1005	4.80E-05	1.71E-04	0.00E+00
26	e_0550	BAT2	r_1006	4.80E-05	1.71E-04	0.00E+00
27	e_0457	BAT1	r_1007	4.80E-05	1.71E-04	0.00E+00
28	e_0031	ILS1	r_1008	0.00E+00	0.00E+00	0.00E+00
29	e_0907	ISM1	r_1009	0.00E+00	0.00E+00	0.00E+00
30	e_0922	IDI1	r_1010	0.00E+00	0.00E+00	0.00E+00
31	e_0402	LSC2	r_1011	3.32E-06	4.24E-06	4.64E-05
32	e_0863	LSC1	r_1012	3.32E-06	4.24E-06	4.64E-05
33	e_0685	ILV5	r_1021	3.81E+00	3.86E+00	5.41E-02
34	e_0663	BNA5	r_1022	9.61E-05	3.42E-04	0.00E+00
35	e_0032	BNA4	r_1023	4.57E-05	1.63E-04	0.00E+00
36	e_0431	PUT2	r_1024	0.00E+00	0.00E+00	0.00E+00
37	e_0431	PUT2	r_1025	6.40E-05	2.28E-04	0.00E+00
38	e_0642	ALT1	r_1026	7.62E-05	2.71E-04	3.88E-04
39	e_0260	GLY1	r_1027	1.36E-07	8.06E-06	3.88E-04
40	e_0748	YMR226C	r_1029	0.00E+00	0.00E+00	0.00E+00
41	e_0062	LYS2	r_1030	4.80E-05	1.71E-04	0.00E+00
42	e_0343	LYS5	r_1031	0.00E+00	0.00E+00	0.00E+00
43	e_0212	ASP1	r_1032	0.00E+00	0.00E+00	0.00E+00
44	e_0653	ASP3-1	r_1033	0.00E+00	0.00E+00	0.00E+00
45	e_0654	ASP3-2	r_1034	0.00E+00	0.00E+00	0.00E+00
46	e_0655	ASP3-3	r_1035	0.00E+00	0.00E+00	0.00E+00
47	e_0656	ASP3-4	r_1036	1.75E-05	6.21E-05	0.00E+00
48	e_0629	AAT2	r_1037	0.00E+00	0.00E+00	0.00E+00
49	e_0574	AAT1	r_1038	1.22E-05	4.33E-05	4.70E-04
50	e_0630	AAT2	r_1039	0.00E+00	0.00E+00	0.00E+00
51	e_0276	PRO3	r_1040	2.18E-05	7.77E-05	0.00E+00
52	e_0447	GRE3				
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2	e_0842	GRE2	r_1041	1.12E-04	3.99E-04	2.56E-03
3	e_0109	CHA1	r_1042	3.46E-08	1.32E-07	1.30E-03
4	e_0748	YMR226C	r_1043	0.00E+00	0.00E+00	0.00E+00
5	e_0554	SOR1	r_1045	1.00E-06	3.56E-06	2.44E-05
6	e_0109	CHA1	r_1046	0.00E+00	0.00E+00	0.00E+00
7	e_0295	ILV1	r_1047	0.00E+00	0.00E+00	0.00E+00
8	e_0538	BNA2	r_1048	6.08E-01	6.19E-01	6.11E-01
9	e_0230	DIT1	r_1049	8.00E-05	2.85E-04	7.90E-03
10	e_0698	GLO1	r_1050	8.00E-05	2.85E-04	2.12E-02
11	e_0440	ERG7	r_1051	1.75E-05	6.21E-05	1.59E-04
12	e_0550	BAT2	r_1054	8.00E-05	2.85E-04	1.06E-02
13	e_0457	BAT1	r_1055	6.36E-06	2.26E-05	1.49E-02
14	e_0926	CDC60	r_1056	9.65E-07	3.44E-06	0.00E+00
15	e_0689	NAM2	r_1057	5.13E-09	1.97E-08	1.92E-04
16	e_0772	LAP2	r_1058	0.00E+00	0.00E+00	0.00E+00
17	e_0773	LAP2	r_1063	2.00E+03	2.00E+03	6.91E-04
18	e_0772	LAP2	r_1065	0.00E+00	0.00E+00	0.00E+00
19	e_0773	LAP2	r_1066	1.84E-08	7.06E-08	6.91E-04
20	e_0772	LAP2	r_1067	0.00E+00	0.00E+00	0.00E+00
21	e_0773	LAP2	r_1068	0.00E+00	0.00E+00	0.00E+00
22	e_0171	KRS1	r_1069	0.00E+00	0.00E+00	6.78E-09
23	e_0776	MSK1	r_1070	0.00E+00	0.00E+00	0.00E+00
24	e_0571	MDH1	r_1071	1.00E+03	1.00E+03	0.00E+00
25	e_0838	MDH2	r_1072	4.80E-05	1.71E-04	3.44E-04
26	e_0137	MDH3	r_1073	0.00E+00	0.00E+00	0.00E+00
27	e_0487	DAL7	r_1074	2.74E-05	9.77E-05	0.00E+00
28	e_0782	MLS1	r_1075	7.75E-06	2.76E-05	0.00E+00
29	e_0783	MLS1	r_1076	0.00E+00	0.00E+00	0.00E+00
30	e_0564	MAE1	r_1077	4.80E-05	1.71E-04	0.00E+00
31	e_0564	MAE1	r_1078	4.80E-05	1.71E-04	0.00E+00
32	e_0878	MCT1	r_1079	2.74E-05	9.77E-05	0.00E+00
33	e_0134	PSA1	r_1080	2.74E-05	9.77E-05	0.00E+00
34	e_0269	PMI40	r_1081	0.00E+00	0.00E+00	6.78E-09
35	e_0057	MIS1	r_1082	0.00E+00	0.00E+00	0.00E+00
36	e_0396	ADE3	r_1083	0.00E+00	0.00E+00	6.78E-09
37	e_0239	SAM2	r_1084	1.00E+03	1.00E+03	1.91E-02
38	e_0658	SAM1	r_1087	2.00E+03	2.00E+03	1.93E-02
39	e_0298	MET6	r_1088	2.00E+03	2.00E+03	1.75E-02
40	e_0021	FMT1	r_1089	4.78E-08	1.83E-07	1.79E-03
41	e_0409	MES1	r_1090	0.00E+00	0.00E+00	0.00E+00
42	e_0384	MSM1	r_1091	1.07E-05	3.80E-05	0.00E+00
43	e_0610	MTD1	r_1092	0.00E+00	0.00E+00	0.00E+00
44	e_0396	ADE3	r_1093	0.00E+00	0.00E+00	0.00E+00
45	e_0057	MIS1	r_1094	0.00E+00	0.00E+00	0.00E+00
46	e_0949	ICL2	r_1095	0.00E+00	0.00E+00	0.00E+00
47	e_0745	ERG12	r_1619	4.80E-05	1.71E-04	0.00E+00
48	e_0745	ERG12	r_1838	1.56E-06	5.57E-06	1.94E-03
49	e_0745	ERG12	r_2029	0.00E+00	0.00E+00	0.00E+00
50	e_0745	ERG12	r_2112	0.00E+00	0.00E+00	0.00E+00
51	e_0812	MVD1	r_2113	0.00E+00	0.00E+00	0.00E+00
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2	e_0049	CSG2	r_2114	4.08E-07	0.00E+00	1.51E-02
3	e_0073	CSH1	r_2115	1.00E+03	1.00E+03	0.00E+00
4	e_0909	SUR1	r_2116	1.07E-04	3.80E-04	0.00E+00
5	e_0049	CSG2	r_2117	2.00E+03	2.00E+03	1.82E-02
6	e_0073	CSH1	r_2118	9.65E-07	3.44E-06	0.00E+00
7	e_0909	SUR1	r_2119	2.00E+03	2.00E+03	0.00E+00
8	e_0049	CSG2	r_2126	4.80E-05	1.71E-04	0.00E+00
9	e_0073	CSH1	r_2131	2.21E-04	7.87E-04	7.31E-03
10	e_0909	SUR1	r_2140	2.02E-04	4.43E-04	1.43E-04
11	e_0049	CSG2	r_2141	1.90E-04	4.06E-04	8.42E-06
12	e_0073	CSH1	r_2142	0.00E+00	0.00E+00	0.00E+00
13	e_0909	SUR1	r_2143	0.00E+00	0.00E+00	0.00E+00
14	e_0049	CSG2	r_2144	0.00E+00	0.00E+00	0.00E+00
15	e_0073	CSH1	r_2145	0.00E+00	0.00E+00	0.00E+00
16	e_0909	SUR1	r_2146	0.00E+00	0.00E+00	0.00E+00
17	e_0049	CSG2	r_2147	0.00E+00	0.00E+00	0.00E+00
18	e_0073	CSH1	r_2148	0.00E+00	0.00E+00	0.00E+00
19	e_0909	SUR1	r_2149	0.00E+00	0.00E+00	0.00E+00
20	e_0049	CSG2	r_2150	0.00E+00	0.00E+00	0.00E+00
21	e_0073	CSH1	r_2151	0.00E+00	0.00E+00	0.00E+00
22	e_0909	SUR1	r_2152	0.00E+00	0.00E+00	0.00E+00
23	e_0049	CSG2	r_2153	0.00E+00	0.00E+00	0.00E+00
24	e_0073	CSH1	r_2154	1.08E-05	3.84E-05	0.00E+00
25	e_0909	SUR1	r_2155	1.08E-05	3.84E-05	0.00E+00
26	e_0049	CSG2	r_2156	1.90E-04	4.06E-04	0.00E+00
27	e_0073	CSH1	r_2157	7.42E-06	2.51E-05	2.92E-06
28	e_0909	SUR1	r_2158	4.87E-06	1.60E-05	2.92E-06
29	e_0049	CSG2	r_2159	3.73E-06	1.19E-05	2.92E-06
30	e_0073	CSH1	r_2160	2.25E-05	4.37E-05	0.00E+00
31	e_0909	SUR1	r_2161	1.08E-05	3.84E-05	0.00E+00
32	e_0204	INM2	r_2162	1.08E-05	3.84E-05	0.00E+00
33	e_0435	INM1	r_2163	1.90E-04	4.06E-04	0.00E+00
34	e_0512	INO1	r_2164	7.42E-06	2.51E-05	2.92E-06
35	e_0290	ARG5,6	r_2165	4.87E-06	1.60E-05	2.92E-06
36	e_0310	GNA1	r_2166	3.73E-06	1.19E-05	2.92E-06
37	e_0498	ARG2	r_2167	2.25E-05	4.37E-05	0.00E+00
38	e_0729	ARG7	r_2168	1.08E-05	3.84E-05	0.00E+00
39	e_0232	BNA7	r_2169	1.08E-05	3.84E-05	0.00E+00
40	e_0228	DIT2	r_2170	1.90E-04	4.06E-04	0.00E+00
41	e_0230	DIT1	r_2171	7.42E-06	2.51E-05	2.92E-06
42	e_0336	NPY1	r_2172	4.87E-06	1.60E-05	2.92E-06
43	e_0257	YEF1	r_2173	3.73E-06	1.19E-05	2.92E-06
44	e_0533	UTR1	r_2174	2.25E-05	4.37E-05	0.00E+00
45	e_0258	YEF1	r_2175	1.08E-05	3.84E-05	0.00E+00
46	e_0534	UTR1	r_2176	1.08E-05	3.84E-05	0.00E+00
47	e_0928	POS5	r_2177	1.90E-04	4.06E-04	0.00E+00
48	e_0130	SIR2	r_2178	7.42E-06	2.51E-05	2.92E-06
49	e_0189	HST4	r_2179	4.87E-06	1.60E-05	2.92E-06
50	e_0833	HST1	r_2180	3.73E-06	1.19E-05	2.92E-06
51	e_0845	HST3	r_2181	2.25E-05	4.37E-05	0.00E+00
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2	e_0902	HST2	r_2182	1.68E-04	4.72E-04	6.50E-05
3	e_0441	QNS1	r_2183	1.52E-04	3.65E-04	5.50E-06
4	e_0442	QNS1	r_2194	2.00E+03	2.00E+03	0.00E+00
5	e_0139	NDE2	r_2195	2.00E+03	2.00E+03	0.00E+00
6	e_0737	NDE1	r_2196	2.00E+03	2.00E+03	0.00E+00
7	e_0257	YEF1	r_2197	2.00E+03	2.00E+03	0.00E+00
8	e_0533	UTR1	r_2198	2.00E+03	2.00E+03	0.00E+00
9	e_0258	YEF1	r_2199	2.00E+03	2.00E+03	0.00E+00
10	e_0534	UTR1	r_2200	2.00E+03	2.00E+03	0.00E+00
11	e_0928	POS5	r_2201	2.00E+03	2.00E+03	0.00E+00
12	e_0714	NDI1	r_2202	2.00E+03	2.00E+03	2.27E-06
13	e_0876	NPT1	r_2203	2.00E+03	2.00E+03	0.00E+00
14	e_0877	NPT1	r_2204	2.00E+03	2.00E+03	0.00E+00
15	e_0331	PNC1	r_2205	2.00E+03	2.00E+03	0.00E+00
16	e_0670	NNT1	r_2206	4.49E-05	1.60E-04	0.00E+00
17	e_0680	NMA1	r_2207	4.49E-05	1.60E-04	0.00E+00
18	e_0359	NMA2	r_2208	4.49E-05	1.60E-04	0.00E+00
19	e_0681	NMA1	r_2209	0.00E+00	0.00E+00	0.00E+00
20	e_0358	NMA2	r_2210	0.00E+00	0.00E+00	0.00E+00
21	e_0680	NMA1	r_2211	2.00E+03	2.00E+03	0.00E+00
22	e_0323	BNA6	r_2212	2.00E+03	2.00E+03	0.00E+00
23	e_0324	BNA6	r_2213	0.00E+00	0.00E+00	0.00E+00
24	e_0271	YND1	r_2214	2.00E+03	2.00E+03	2.92E-06
25	e_0271	YND1	r_2215	2.00E+03	2.00E+03	0.00E+00
26	e_0271	YND1	r_2216	0.00E+00	0.00E+00	0.00E+00
27	e_0259	GDA1	r_2217	2.00E+03	2.00E+03	0.00E+00
28	e_0271	YND1	r_2218	2.00E+03	2.00E+03	0.00E+00
29	e_0271	YND1	r_2232	9.68E-07	3.45E-06	0.00E+00
30	e_0568	YNK1	r_2233	8.13E-07	2.89E-06	0.00E+00
31	e_0568	YNK1	r_2234	2.74E-05	9.77E-05	0.00E+00
32	e_0568	YNK1	r_2235	2.74E-05	9.77E-05	0.00E+00
33	e_0568	YNK1	r_2236	1.49E-06	5.31E-06	0.00E+00
34	e_0568	YNK1	r_2237	1.49E-06	5.31E-06	0.00E+00
35	e_0568	YNK1	r_2238	1.49E-06	5.31E-06	0.00E+00
36	e_0568	YNK1	r_2239	6.67E-06	2.37E-05	0.00E+00
37	e_0568	YNK1	r_2240	4.12E-06	1.47E-05	0.00E+00
38	e_0568	YNK1	r_2241	2.98E-06	1.06E-05	0.00E+00
39	e_0271	YND1	r_2242	1.43E-06	5.07E-06	0.00E+00
40	e_0271	YND1	r_2243	1.43E-06	5.07E-06	0.00E+00
41	e_0271	YND1	r_2244	1.43E-06	5.07E-06	0.00E+00
42	e_0271	YND1	r_2245	3.01E-06	1.07E-05	0.00E+00
43	e_0259	GDA1	r_2246	3.01E-06	1.07E-05	0.00E+00
44	e_0568	YNK1	r_2247	3.01E-06	1.07E-05	0.00E+00
45	e_0674	MET17	r_2248	1.49E-06	5.31E-06	0.00E+00
46	e_0674	MET17	r_2249	1.49E-06	5.31E-06	0.00E+00
47	e_0008	CYS3	r_2250	1.08E-05	3.84E-05	0.00E+00
48	e_0499	ARG3	r_2251	1.33E-05	4.52E-05	0.00E+00
49	e_0587	SPE1	r_2252	1.08E-05	3.84E-05	0.00E+00
50	e_0729	ARG7	r_2253	2.34E-06	8.32E-06	0.00E+00
51	e_0694	CAR2	r_2254	1.49E-06	5.31E-06	0.00E+00
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2	e_0712	URA5	r_2255	1.49E-06	5.31E-06	0.00E+00
3	e_0755	URA10	r_2256	1.49E-06	5.31E-06	0.00E+00
4	e_0249	URA3	r_2257	6.67E-06	2.37E-05	0.00E+00
5	e_0185	KGD2	r_2258	4.12E-06	1.47E-05	0.00E+00
6	e_0311	LPD1	r_2259	2.98E-06	1.06E-05	0.00E+00
7	e_0477	KGD1	r_2260	1.43E-06	5.07E-06	0.00E+00
8	e_0185	KGD2	r_2261	1.43E-06	5.07E-06	0.00E+00
9	e_0311	LPD1	r_2262	1.43E-06	5.07E-06	0.00E+00
10	e_0477	KGD1	r_2263	3.01E-06	1.07E-05	0.00E+00
11	e_0411	CAB4	r_2264	3.01E-06	1.07E-05	0.00E+00
12	e_0245	CAB1	r_2265	1.26E-06	4.48E-06	0.00E+00
13	e_0479	PAN6	r_2266	1.49E-06	5.31E-06	0.00E+00
14	e_0529	TES1	r_2267	1.49E-06	5.31E-06	0.00E+00
15	e_0529	TES1	r_2268	1.33E-05	4.52E-05	0.00E+00
16	e_0529	TES1	r_2269	1.08E-05	3.84E-05	0.00E+00
17	e_0529	TES1	r_2270	2.34E-06	8.32E-06	0.00E+00
18	e_0529	TES1	r_2271	1.49E-06	5.31E-06	0.00E+00
19	e_0529	TES1	r_2272	1.49E-06	5.31E-06	0.00E+00
20	e_0348	ARO8	r_2273	1.49E-06	5.31E-06	0.00E+00
21	e_0312	FRS2	r_2274	6.67E-06	2.37E-05	0.00E+00
22	e_0639	FRS1	r_2275	4.12E-06	1.47E-05	0.00E+00
23	e_0958	MSF1	r_2276	2.98E-06	1.06E-05	0.00E+00
24	e_0224	ARO10	r_2277	1.43E-06	5.07E-06	0.00E+00
25	e_0352	ADE5,7	r_2278	1.43E-06	5.07E-06	0.00E+00
26	e_0265	PCM1	r_2279	1.43E-06	5.07E-06	0.00E+00
27	e_0398	TRX2	r_2280	3.01E-06	1.07E-05	0.00E+00
28	e_0975	MET16	r_2281	3.01E-06	1.07E-05	0.00E+00
29	e_0612	PCK1	r_2282	1.26E-06	4.48E-06	0.00E+00
30	e_0357	ECT1	r_2283	1.49E-06	5.31E-06	0.00E+00
31	e_0401	PFK1	r_2284	1.49E-06	5.31E-06	0.00E+00
32	e_0743	PFK2	r_2285	1.49E-06	5.31E-06	0.00E+00
33	e_0401	PFK1	r_2286	6.67E-06	2.37E-05	0.00E+00
34	e_0743	PFK2	r_2287	4.12E-06	1.47E-05	0.00E+00
35	e_0576	PGM1	r_2288	2.98E-06	1.06E-05	0.00E+00
36	e_0733	PGM2	r_2289	1.43E-06	5.07E-06	0.00E+00
37	e_0407	GND2	r_2290	1.43E-06	5.07E-06	0.00E+00
38	e_0455	GND1	r_2291	1.43E-06	5.07E-06	0.00E+00
39	e_0265	PCM1	r_2292	3.01E-06	1.07E-05	0.00E+00
40	e_0294	SER3	r_2293	3.01E-06	1.07E-05	0.00E+00
41	e_0469	SER33	r_2294	1.26E-06	4.48E-06	0.00E+00
42	e_0113	PGK1	r_2295	1.43E-06	5.07E-06	0.00E+00
43	e_0582	GPM1	r_2296	1.35E-06	4.79E-06	0.00E+00
44	e_0314	SEC53	r_2297	1.35E-06	4.79E-06	0.00E+00
45	e_0825	THI20	r_2298	1.26E-06	4.48E-06	0.00E+00
46	e_0939	THI21	r_2299	3.01E-06	1.07E-05	0.00E+00
47	e_0966	THI22	r_2300	3.01E-06	1.07E-05	0.00E+00
48	e_0747	ERG8	r_2301	1.35E-06	4.79E-06	0.00E+00
49	e_0471	CAB2	r_2302	3.01E-06	1.07E-05	0.00E+00
50	e_0572	CAB3	r_2303	1.35E-06	4.79E-06	0.00E+00
51	e_0609	SIS2	r_2304	3.01E-06	1.07E-05	0.00E+00
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2	e_0847	VHS3	r_2305	2.00E+03	2.00E+03	4.09E-04
3	e_0576	PGM1	r_2308	1.19E-04	4.22E-04	6.50E-05
4	e_0733	PGM2	r_2309	3.20E-05	1.14E-04	0.00E+00
5	e_0757	PGM3	r_2310	8.11E-05	2.88E-04	0.00E+00
6	e_0017	ADE1	r_2311	2.30E-05	8.17E-05	0.00E+00
7	e_0103	HIS4	r_2312	1.07E-04	3.80E-04	0.00E+00
8	e_0103	HIS4	r_2313	2.46E-05	8.76E-05	0.00E+00
9	e_0860	ADE2	r_2314	4.61E-05	1.64E-04	0.00E+00
10	e_0631	ADE16	r_2315	1.89E-05	6.72E-05	0.00E+00
11	e_0736	ADE17	r_2316	8.11E-05	2.88E-04	0.00E+00
12	e_0165	TRP1	r_2317	2.30E-05	8.17E-05	0.00E+00
13	e_0352	ADE5,7	r_2318	4.05E-05	1.44E-04	0.00E+00
14	e_0763	ADE4	r_2319	1.79E-05	6.36E-05	0.00E+00
15	e_0030	PRS4	r_2320	4.61E-05	1.64E-04	0.00E+00
16	e_0299	PRS2	r_2321	1.89E-05	6.72E-05	0.00E+00
17	e_0418	PRS3	r_2322	2.94E-05	1.05E-04	0.00E+00
18	e_0585	PRS1	r_2323	1.53E-05	5.45E-05	0.00E+00
19	e_0829	PRS5	r_2324	1.07E-04	3.80E-04	0.00E+00
20	e_0397	SER2	r_2325	2.46E-05	8.76E-05	0.00E+00
21	e_0872	SER1	r_2326	4.61E-05	1.64E-04	0.00E+00
22	e_0077	YPC1	r_2327	1.89E-05	6.72E-05	0.00E+00
23	e_0229	DIT2	r_2328	4.61E-05	1.64E-04	0.00E+00
24	e_0205	DPL1	r_2329	1.89E-05	6.72E-05	0.00E+00
25	e_0206	SUR2	r_2330	2.94E-05	1.05E-04	0.00E+00
26	e_0725	FMS1	r_2331	1.53E-05	5.45E-05	0.00E+00
27	e_0332	HEM2	r_2332	9.70E-05	3.45E-04	6.50E-05
28	e_0725	FMS1	r_2333	8.11E-05	2.88E-04	0.00E+00
29	e_0725	FMS1	r_2334	3.20E-05	1.14E-04	0.00E+00
30	e_0802	PHA2	r_2335	2.30E-05	8.17E-05	0.00E+00
31	e_0074	TYR1	r_2336	8.11E-05	2.88E-04	0.00E+00
32	e_0649	PUT1	r_2337	4.05E-05	1.44E-04	0.00E+00
33	e_0985	YHR020W	r_2338	2.30E-05	8.17E-05	0.00E+00
34	e_0272	HEM14	r_2339	1.79E-05	6.36E-05	0.00E+00
35	e_0227	URH1	r_2340	8.11E-05	2.88E-04	0.00E+00
36	e_0627	MEU1	r_2341	2.30E-05	8.17E-05	0.00E+00
37	e_0661	PNP1	r_2342	4.05E-05	1.44E-04	0.00E+00
38	e_0661	PNP1	r_2343	1.79E-05	6.36E-05	0.00E+00
39	e_0662	PNP1	r_2344	1.07E-04	2.35E-04	0.00E+00
40	e_0661	PNP1	r_2345	8.09E-05	2.06E-04	0.00E+00
41	e_0048	PDX3	r_2346	7.38E-05	1.99E-04	0.00E+00
42	e_0048	PDX3	r_2347	7.38E-05	1.99E-04	0.00E+00
43	e_0048	PDX3	r_2348	8.09E-05	2.06E-04	0.00E+00
44	e_0048	PDX3	r_2349	7.38E-05	1.99E-04	0.00E+00
45	e_0276	PRO3	r_2350	7.38E-05	1.99E-04	0.00E+00
46	e_0084	PYC2	r_2351	7.38E-05	1.99E-04	0.00E+00
47	e_0334	PYC1	r_2352	0.00E+00	0.00E+00	0.00E+00
48	e_0370	PDC6	r_2353	0.00E+00	0.00E+00	0.00E+00
49	e_0636	PDC1	r_2354	0.00E+00	0.00E+00	0.00E+00
50	e_0647	PDC5	r_2355	0.00E+00	0.00E+00	0.00E+00
51	e_0370	PDC6	r_2356	0.00E+00	0.00E+00	0.00E+00
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2	e_0636	PDC1	r_2357	0.00E+00	0.00E+00	0.00E+00
3	e_0647	PDC5	r_2358	0.00E+00	0.00E+00	0.00E+00
4	e_0085	PDB1	r_2359	0.00E+00	0.00E+00	0.00E+00
5	e_0306	PDA1	r_2360	1.07E-04	2.35E-04	0.00E+00
6	e_0311	LPD1	r_2361	8.09E-05	2.06E-04	0.00E+00
7	e_0393	PDX1	r_2362	7.38E-05	1.99E-04	0.00E+00
8	e_0775	LAT1	r_2363	7.38E-05	1.99E-04	0.00E+00
9	e_0011	CDC19	r_2364	8.09E-05	2.06E-04	0.00E+00
10	e_0895	PYK2	r_2365	7.38E-05	1.99E-04	0.00E+00
11	e_0191	COQ4	r_2366	7.38E-05	1.99E-04	0.00E+00
12	e_0339	COQ8	r_2367	7.38E-05	1.99E-04	0.00E+00
13	e_0406	COQ6	r_2368	1.37E-04	2.15E-04	1.09E-04
14	e_0660	COQ9	r_2369	6.17E-05	1.60E-04	0.00E+00
15	e_0713	COQ5	r_2370	3.20E-05	1.14E-04	0.00E+00
16	e_0835	COQ3	r_2371	2.74E-05	9.77E-05	0.00E+00
17	e_0858	CAT5	r_2372	6.17E-05	1.60E-04	0.00E+00
18	e_0183	YCF1	r_2373	3.08E-05	1.10E-04	0.00E+00
19	e_0197	FMN1	r_2374	2.74E-05	9.77E-05	0.00E+00
20	e_0198	FMN1	r_2375	2.74E-05	9.77E-05	0.00E+00
21	e_0841	RIB4	r_2376	3.20E-05	1.14E-04	0.00E+00
22	e_0090	RIB5	r_2377	3.20E-05	1.14E-04	0.00E+00
23	e_0119	RBK1	r_2378	3.20E-05	1.14E-04	0.00E+00
24	e_0398	TRX2	r_2379	3.20E-05	1.14E-04	0.00E+00
25	e_0398	TRX2	r_2380	3.20E-05	1.14E-04	0.00E+00
26	e_0398	TRX2	r_2381	3.20E-05	1.14E-04	0.00E+00
27	e_0398	TRX2	r_2382	3.20E-05	1.14E-04	0.00E+00
28	e_0291	RNR1	r_2383	3.20E-05	1.14E-04	0.00E+00
29	e_0387	RNR4	r_2384	6.17E-05	1.60E-04	0.00E+00
30	e_0467	RNR3	r_2385	3.08E-05	1.10E-04	0.00E+00
31	e_0492	RNR2	r_2386	2.74E-05	9.77E-05	0.00E+00
32	e_0292	RNR1	r_2387	2.74E-05	9.77E-05	0.00E+00
33	e_0388	RNR4	r_2388	3.08E-05	1.10E-04	0.00E+00
34	e_0468	RNR3	r_2389	2.74E-05	9.77E-05	0.00E+00
35	e_0493	RNR2	r_2390	2.74E-05	9.77E-05	0.00E+00
36	e_0291	RNR1	r_2391	2.74E-05	9.77E-05	0.00E+00
37	e_0387	RNR4	r_2392	2.74E-05	9.77E-05	0.00E+00
38	e_0467	RNR3	r_2393	2.74E-05	9.77E-05	0.00E+00
39	e_0492	RNR2	r_2394	2.74E-05	9.77E-05	0.00E+00
40	e_0292	RNR1	r_2395	2.74E-05	9.77E-05	0.00E+00
41	e_0388	RNR4	r_2396	2.74E-05	9.77E-05	0.00E+00
42	e_0468	RNR3	r_2397	2.74E-05	9.77E-05	0.00E+00
43	e_0493	RNR2	r_2398	2.74E-05	9.77E-05	0.00E+00
44	e_0291	RNR1	r_2399	2.74E-05	9.77E-05	0.00E+00
45	e_0387	RNR4	r_2400	1.37E-04	2.15E-04	1.18E-04
46	e_0467	RNR3	r_2401	6.17E-05	1.60E-04	0.00E+00
47	e_0492	RNR2	r_2402	3.20E-05	1.14E-04	0.00E+00
48	e_0292	RNR1	r_2403	2.74E-05	9.77E-05	0.00E+00
49	e_0388	RNR4	r_2404	6.17E-05	1.60E-04	0.00E+00
50	e_0468	RNR3	r_2405	3.08E-05	1.10E-04	0.00E+00
51	e_0493	RNR2	r_2406	2.74E-05	9.77E-05	0.00E+00
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2	e_0852	RKI1	r_2407	2.74E-05	9.77E-05	0.00E+00
3	e_0784	NRK1	r_2408	3.20E-05	1.14E-04	0.00E+00
4	e_0506	RPE1	r_2409	3.20E-05	1.14E-04	0.00E+00
5	e_0191	COQ4	r_2410	3.20E-05	1.14E-04	0.00E+00
6	e_0339	COQ8	r_2411	3.20E-05	1.14E-04	0.00E+00
7	e_0406	COQ6	r_2412	3.20E-05	1.14E-04	0.00E+00
8	e_0660	COQ9	r_2413	3.20E-05	1.14E-04	0.00E+00
9	e_0713	COQ5	r_2414	3.20E-05	1.14E-04	0.00E+00
10	e_0835	COQ3	r_2415	3.20E-05	1.14E-04	0.00E+00
11	e_0858	CAT5	r_2416	6.17E-05	1.60E-04	0.00E+00
12	e_0699	ERG6	r_2417	3.08E-05	1.10E-04	0.00E+00
13	e_0497	YJL068C	r_2418	2.74E-05	9.77E-05	0.00E+00
14	e_0489	LYS1	r_2419	2.74E-05	9.77E-05	0.00E+00
15	e_0813	LYS9	r_2420	3.08E-05	1.10E-04	0.00E+00
16	e_0567	FBA1	r_2421	2.74E-05	9.77E-05	0.00E+00
17	e_0054	TSC3	r_2422	2.74E-05	9.77E-05	0.00E+00
18	e_0177	LCB2	r_2423	2.74E-05	9.77E-05	0.00E+00
19	e_0761	LCB1	r_2424	2.74E-05	9.77E-05	0.00E+00
20	e_0168	SES1	r_2425	2.74E-05	9.77E-05	0.00E+00
21	e_0425	DIA4	r_2426	2.74E-05	9.77E-05	0.00E+00
22	e_0182	ARO1	r_2427	2.74E-05	9.77E-05	0.00E+00
23	e_0182	ARO1	r_2428	2.74E-05	9.77E-05	0.00E+00
24	e_0083	MET8	r_2429	2.74E-05	9.77E-05	0.00E+00
25	e_0083	MET8	r_2430	2.74E-05	9.77E-05	0.00E+00
26	e_0261	FRD1	r_2431	2.74E-05	9.77E-05	0.00E+00
27	e_0961	SPE3	r_2432	1.67E-04	4.65E-04	6.50E-05
28	e_0650	SPE4	r_2433	7.38E-05	1.60E-04	0.00E+00
29	e_0205	DPL1	r_2434	1.03E-04	3.18E-04	0.00E+00
30	e_0509	LCB3	r_2435	7.38E-05	1.49E-04	0.00E+00
31	e_0602	YSR3	r_2436	1.03E-04	3.18E-04	0.00E+00
32	e_0509	LCB3	r_2437	7.38E-05	1.49E-04	0.00E+00
33	e_0602	YSR3	r_2438	7.38E-05	1.87E-04	0.00E+00
34	e_0668	LCB5	r_2439	7.38E-05	1.49E-04	0.00E+00
35	e_0868	LCB4	r_2440	5.36E-05	1.17E-04	0.00E+00
36	e_0668	LCB5	r_2441	3.69E-05	9.93E-05	0.00E+00
37	e_0868	LCB4	r_2442	4.05E-05	1.03E-04	0.00E+00
38	e_0385	ERG1	r_2443	3.69E-05	9.93E-05	0.00E+00
39	e_0385	ERG1	r_2444	4.05E-05	1.03E-04	0.00E+00
40	e_0456	ERG9	r_2445	3.69E-05	9.93E-05	0.00E+00
41	e_0188	SDH4	r_2446	8.60E-05	3.06E-04	4.06E-05
42	e_0494	YJL045W	r_2447	4.35E-05	1.26E-04	0.00E+00
43	e_0579	SDH3	r_2448	8.11E-05	2.88E-04	0.00E+00
44	e_0581	SDH1	r_2449	4.22E-05	1.14E-04	0.00E+00
45	e_0619	SDH2	r_2450	8.11E-05	2.88E-04	0.00E+00
46	e_0402	LSC2	r_2451	4.22E-05	1.14E-04	0.00E+00
47	e_0863	LSC1	r_2452	4.61E-05	1.52E-04	0.00E+00
48	e_0037	UGA2	r_2453	4.22E-05	1.14E-04	0.00E+00
49	e_0482	SUC2	r_2454	1.42E-04	3.02E-04	2.44E-05
50	e_0526	MET3	r_2455	7.38E-05	1.60E-04	0.00E+00
51	e_0107	APA1	r_2456	8.13E-05	1.69E-04	0.00E+00
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2	e_0321	MET10	r_2457	7.38E-05	1.49E-04	0.00E+00
3	e_0547	MET5	r_2458	8.13E-05	1.69E-04	0.00E+00
4	e_0621	YBT1	r_2459	7.38E-05	1.49E-04	0.00E+00
5	e_0623	JLP1	r_2460	7.38E-05	1.49E-04	0.00E+00
6	e_0012	GCV3	r_2461	7.38E-05	1.49E-04	0.00E+00
7	e_0167	GCV1	r_2462	0.00E+00	0.00E+00	0.00E+00
8	e_0306	PDA1	r_2463	0.00E+00	0.00E+00	0.00E+00
9	e_0741	GCV2	r_2464	1.93E-04	5.14E-04	3.66E-05
10	e_0577	RMA1	r_2465	4.35E-05	1.26E-04	0.00E+00
11	e_0882	MET7	r_2466	8.11E-05	2.88E-04	0.00E+00
12	e_0059	PHO3	r_2467	4.22E-05	1.14E-04	0.00E+00
13	e_0059	PHO3	r_2468	8.11E-05	2.88E-04	0.00E+00
14	e_0864	THI80	r_2469	4.22E-05	1.14E-04	0.00E+00
15	e_0864	THI80	r_2470	4.61E-05	1.52E-04	0.00E+00
16	e_0933	THI6	r_2471	4.22E-05	1.14E-04	0.00E+00
17	e_0399	TRX2	r_2472	1.92E-04	5.12E-04	0.00E+00
18	e_0463	DOT5	r_2473	3.73E-05	1.08E-04	0.00E+00
19	e_0218	TRR1	r_2474	5.70E-05	2.03E-04	0.00E+00
20	e_0398	TRX2	r_2475	3.69E-05	9.93E-05	0.00E+00
21	e_0124	TRX3	r_2476	5.70E-05	2.03E-04	0.00E+00
22	e_0448	TRR2	r_2477	3.69E-05	9.93E-05	0.00E+00
23	e_0916	GLR1	r_2478	3.79E-05	1.25E-04	0.00E+00
24	e_0260	GLY1	r_2479	3.69E-05	9.93E-05	0.00E+00
25	e_0122	THR4	r_2480	1.92E-04	5.12E-04	0.00E+00
26	e_0470	THS1	r_2481	3.73E-05	1.08E-04	0.00E+00
27	e_0590	MST1	r_2482	5.70E-05	2.03E-04	0.00E+00
28	e_0850	CDC21	r_2483	3.69E-05	9.93E-05	0.00E+00
29	e_0305	TMT1	r_2484	5.70E-05	2.03E-04	0.00E+00
30	e_0035	COQ1	r_2485	3.69E-05	9.93E-05	0.00E+00
31	e_0684	TAL1	r_2486	3.79E-05	1.25E-04	0.00E+00
32	e_0063	TKL2	r_2487	3.69E-05	9.93E-05	0.00E+00
33	e_0962	TKL1	r_2488	3.81E-04	4.12E-04	4.09E-04
34	e_0063	TKL2	r_2489	4.35E-05	1.26E-04	0.00E+00
35	e_0962	TKL1	r_2490	8.11E-05	2.88E-04	0.00E+00
36	e_0065	TPS1	r_2491	4.22E-05	1.14E-04	0.00E+00
37	e_0179	TPS2	r_2492	3.81E-04	4.12E-04	3.80E-04
38	e_0711	TSL1	r_2493	4.35E-05	1.26E-04	0.00E+00
39	e_0753	TPS3	r_2494	8.11E-05	2.88E-04	0.00E+00
40	e_0175	TPI1	r_2495	4.22E-05	1.14E-04	0.00E+00
41	e_0330	TRP5	r_2496	3.81E-04	4.12E-04	4.09E-04
42	e_0348	ARO8	r_2497	4.35E-05	1.26E-04	0.00E+00
43	e_0836	WRS1	r_2498	8.11E-05	2.88E-04	0.00E+00
44	e_0201	MSW1	r_2499	4.22E-05	1.14E-04	0.00E+00
45	e_0348	ARO8	r_2500	3.81E-04	4.12E-04	3.80E-04
46	e_0630	AAT2	r_2501	4.35E-05	1.26E-04	0.00E+00
47	e_0390	TYS1	r_2502	8.11E-05	2.88E-04	0.00E+00
48	e_0918	MSY1	r_2503	4.22E-05	1.14E-04	0.00E+00
49	e_0659	ATG26	r_2504	3.81E-04	4.12E-04	4.09E-04
50	e_0144	QRI1	r_2505	4.35E-05	1.26E-04	0.00E+00
51	e_0040	GAL10	r_2506	8.11E-05	2.88E-04	0.00E+00
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2	e_0039	GAL7	r_2507	4.22E-05	1.14E-04	0.00E+00
3	e_0561	URA6	r_2508	3.81E-04	4.12E-04	3.80E-04
4	e_0562	URA6	r_2509	4.35E-05	1.26E-04	0.00E+00
5	e_0450	FUR1	r_2510	8.11E-05	2.88E-04	0.00E+00
6	e_0082	DUR1,2	r_2511	4.22E-05	1.14E-04	0.00E+00
7	e_0488	DAL3	r_2512	7.38E-05	1.99E-04	0.00E+00
8	e_0806	URK1	r_2513	7.38E-05	1.99E-04	0.00E+00
9	e_0806	URK1	r_2514	7.38E-05	1.99E-04	0.00E+00
10	e_0561	URA6	r_2515	7.38E-05	1.99E-04	0.00E+00
11	e_0562	URA6	r_2516	7.38E-05	1.99E-04	0.00E+00
12	e_0174	HEM12	r_2517	7.38E-05	1.99E-04	0.00E+00
13	e_0608	MET1	r_2518	7.38E-05	1.99E-04	0.00E+00
14	e_0887	HEM4	r_2519	7.38E-05	1.99E-04	0.00E+00
15	e_0565	UGP1	r_2520	0.00E+00	0.00E+00	0.00E+00
16	e_0066	VMA2	r_2521	0.00E+00	0.00E+00	0.00E+00
17	e_0155	VMA1	r_2522	0.00E+00	0.00E+00	0.00E+00
18	e_0251	VMA3	r_2523	0.00E+00	0.00E+00	0.00E+00
19	e_0263	VMA8	r_2524	0.00E+00	0.00E+00	0.00E+00
20	e_0362	VMA7	r_2525	0.00E+00	0.00E+00	0.00E+00
21	e_0429	VMA16	r_2526	0.00E+00	0.00E+00	0.00E+00
22	e_0432	VMA10	r_2527	0.00E+00	0.00E+00	0.00E+00
23	e_0569	VMA5	r_2528	4.22E-05	1.14E-04	0.00E+00
24	e_0695	VMA6	r_2529	4.22E-05	1.14E-04	0.00E+00
25	e_0727	STV1	r_2530	4.22E-05	1.14E-04	0.00E+00
26	e_0892	VMA4	r_2531	4.22E-05	1.14E-04	0.00E+00
27	e_0935	VMA11	r_2532	4.22E-05	1.14E-04	0.00E+00
28	e_0956	VMA13	r_2533	4.22E-05	1.14E-04	0.00E+00
29	e_0067	VMA2	r_2534	4.22E-05	1.14E-04	0.00E+00
30	e_0156	VMA1	r_2535	4.22E-05	1.14E-04	0.00E+00
31	e_0252	VMA3	r_2536	5.36E-05	1.17E-04	0.00E+00
32	e_0264	VMA8	r_2537	3.69E-05	9.93E-05	0.00E+00
33	e_0363	VMA7	r_2538	4.05E-05	1.03E-04	0.00E+00
34	e_0430	VMA16	r_2539	3.69E-05	9.93E-05	0.00E+00
35	e_0433	VMA10	r_2540	4.05E-05	1.03E-04	0.00E+00
36	e_0570	VMA5	r_2541	3.69E-05	9.93E-05	0.00E+00
37	e_0696	VMA6	r_2542	5.36E-05	1.17E-04	0.00E+00
38	e_0884	VPH1	r_2543	3.69E-05	9.93E-05	0.00E+00
39	e_0893	VMA4	r_2544	4.05E-05	1.03E-04	0.00E+00
40	e_0936	VMA11	r_2545	3.69E-05	9.93E-05	0.00E+00
41	e_0957	VMA13	r_2546	4.05E-05	1.03E-04	0.00E+00
42	e_0550	BAT2	r_2547	3.69E-05	9.93E-05	0.00E+00
43	e_0457	BAT1	r_2548	0.00E+00	0.00E+00	0.00E+00
44	e_0372	VAS1	r_2549	0.00E+00	0.00E+00	0.00E+00
45	e_0373	VAS1	r_2550	0.00E+00	0.00E+00	0.00E+00
46	e_0546	XPT1	r_2551	0.00E+00	0.00E+00	0.00E+00
47	e_0640	XYL2	r_2552	0.00E+00	0.00E+00	0.00E+00
48	e_0447	GRE3	r_2553	0.00E+00	0.00E+00	0.00E+00
49	e_0394	XKS1	r_2554	0.00E+00	0.00E+00	0.00E+00
50	e_0308	DEG1	r_2555	0.00E+00	0.00E+00	0.00E+00
51	e_0335	PUS2	r_2556	0.00E+00	0.00E+00	0.00E+00
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2	e_0801	PUS4	r_2557	0.00E+00	0.00E+00	0.00E+00
3	e_0932	PUS1	r_2558	0.00E+00	0.00E+00	0.00E+00
4	e_0879	ODC2	r_2559	0.00E+00	0.00E+00	0.00E+00
5	e_0923	ODC1	r_2560	0.00E+00	0.00E+00	0.00E+00
6	e_0159	UGA4	r_2561	0.00E+00	0.00E+00	0.00E+00
7	e_0896	PUT4	r_2562	0.00E+00	0.00E+00	0.00E+00
8	e_0814	BIO5	r_2563	0.00E+00	0.00E+00	0.00E+00
9	e_0112	ADY2	r_2564	0.00E+00	0.00E+00	0.00E+00
10	e_0284	FCY2	r_2565	0.00E+00	0.00E+00	0.00E+00
11	e_0285	FCY21	r_2566	0.00E+00	0.00E+00	0.00E+00
12	e_0286	FCY22	r_2567	0.00E+00	0.00E+00	0.00E+00
13	e_0345	TPN1	r_2568	0.00E+00	0.00E+00	0.00E+00
14	e_0009	FUN26	r_2569	0.00E+00	0.00E+00	0.00E+00
15	e_0024	PET9	r_2570	0.00E+00	0.00E+00	0.00E+00
16	e_0058	AAC3	r_2571	0.00E+00	0.00E+00	0.00E+00
17	e_0728	AAC1	r_2572	0.00E+00	0.00E+00	0.00E+00
18	e_0967	ANT1	r_2573	0.00E+00	0.00E+00	0.00E+00
19	e_0749	YHM2	r_2574	0.00E+00	0.00E+00	0.00E+00
20	e_0551	DAL5	r_2575	0.00E+00	0.00E+00	0.00E+00
21	e_0485	DAL4	r_2576	0.00E+00	0.00E+00	0.00E+00
22	e_0225	ATO3	r_2577	0.00E+00	0.00E+00	0.00E+00
23	e_0375	MEP1	r_2578	0.00E+00	0.00E+00	0.00E+00
24	e_0787	MEP2	r_2579	0.00E+00	0.00E+00	0.00E+00
25	e_0968	MEP3	r_2580	0.00E+00	0.00E+00	0.00E+00
26	e_0967	ANT1	r_2581	0.00E+00	0.00E+00	0.00E+00
27	e_0951	AGC1	r_2582	0.00E+00	0.00E+00	0.00E+00
28	e_0369	VHT1	r_2583	0.00E+00	0.00E+00	0.00E+00
29	e_0854	CRC1	r_2584	0.00E+00	0.00E+00	0.00E+00
30	e_0337	HNM1	r_2585	0.00E+00	0.00E+00	0.00E+00
31	e_0093	CTP1	r_2586	0.00E+00	0.00E+00	0.00E+00
32	e_0093	CTP1	r_2587	0.00E+00	0.00E+00	0.00E+00
33	e_0093	CTP1	r_2588	0.00E+00	0.00E+00	0.00E+00
34	e_0423	LEU5	r_2589	0.00E+00	0.00E+00	0.00E+00
35	e_0078	RIM2	r_2590	0.00E+00	0.00E+00	0.00E+00
36	e_0078	RIM2	r_2591	0.00E+00	0.00E+00	0.00E+00
37	e_0009	FUN26	r_2592	0.00E+00	0.00E+00	0.00E+00
38	e_0284	FCY2	r_2593	0.00E+00	0.00E+00	0.00E+00
39	e_0285	FCY21	r_2594	0.00E+00	0.00E+00	0.00E+00
40	e_0286	FCY22	r_2595	0.00E+00	0.00E+00	0.00E+00
41	e_0345	TPN1	r_2596	0.00E+00	0.00E+00	0.00E+00
42	e_0162	HXT15	r_2597	0.00E+00	0.00E+00	0.00E+00
43	e_0215	HXT7	r_2598	0.00E+00	0.00E+00	0.00E+00
44	e_0216	HXT6	r_2599	0.00E+00	0.00E+00	0.00E+00
45	e_0217	HXT3	r_2600	0.00E+00	0.00E+00	0.00E+00
46	e_0267	HXT13	r_2601	0.00E+00	0.00E+00	0.00E+00
47	e_0309	HXT10	r_2602	0.00E+00	0.00E+00	0.00E+00
48	e_0444	HXT4	r_2603	0.00E+00	0.00E+00	0.00E+00
49	e_0445	HXT1	r_2604	0.00E+00	0.00E+00	0.00E+00
50	e_0446	HXT5	r_2605	0.00E+00	0.00E+00	0.00E+00
51	e_0520	HXT8	r_2606	0.00E+00	0.00E+00	0.00E+00
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2	e_0522	HXT9	r_2607	0.00E+00	0.00E+00	0.00E+00
3	e_0553	HXT16	r_2608	0.00E+00	0.00E+00	0.00E+00
4	e_0722	HXT2	r_2609	0.00E+00	0.00E+00	0.00E+00
5	e_0818	HXT17	r_2610	0.00E+00	0.00E+00	0.00E+00
6	e_0843	HXT11	r_2611	0.00E+00	0.00E+00	0.00E+00
7	e_0246	STL1	r_2612	0.00E+00	0.00E+00	0.00E+00
8	e_0309	HXT10	r_2613	0.00E+00	0.00E+00	0.00E+00
9	e_0522	HXT9	r_2614	0.00E+00	0.00E+00	0.00E+00
10	e_0641	GAL2	r_2615	0.00E+00	0.00E+00	0.00E+00
11	e_0803	HXT14	r_2616	0.00E+00	0.00E+00	0.00E+00
12	e_0843	HXT11	r_2617	0.00E+00	0.00E+00	0.00E+00
13	e_0596	JEN1	r_2618	0.00E+00	0.00E+00	0.00E+00
14	e_0162	HXT15	r_2619	0.00E+00	0.00E+00	0.00E+00
15	e_0215	HXT7	r_2620	2.00E+03	2.00E+03	0.00E+00
16	e_0216	HXT6	r_2621	2.00E+03	2.00E+03	0.00E+00
17	e_0217	HXT3	r_2622	2.00E+03	2.00E+03	0.00E+00
18	e_0267	HXT13	r_2623	2.00E+03	2.00E+03	0.00E+00
19	e_0309	HXT10	r_2624	2.00E+03	2.00E+03	0.00E+00
20	e_0444	HXT4	r_2625	2.00E+03	2.00E+03	0.00E+00
21	e_0445	HXT1	r_2626	2.00E+03	2.00E+03	0.00E+00
22	e_0446	HXT5	r_2627	2.00E+03	2.00E+03	0.00E+00
23	e_0520	HXT8	r_2628	2.00E+03	2.00E+03	0.00E+00
24	e_0522	HXT9	r_2629	2.00E+03	2.00E+03	0.00E+00
25	e_0553	HXT16	r_2630	2.00E+03	2.00E+03	0.00E+00
26	e_0722	HXT2	r_2631	2.00E+03	2.00E+03	0.00E+00
27	e_0818	HXT17	r_2632	2.00E+03	2.00E+03	0.00E+00
28	e_0843	HXT11	r_2633	2.00E+03	2.00E+03	0.00E+00
29	e_0464	PDR11	r_2634	2.00E+03	2.00E+03	0.00E+00
30	e_0844	AUS1	r_2635	2.00E+03	2.00E+03	0.00E+00
31	e_0464	PDR11	r_2636	2.00E+03	2.00E+03	0.00E+00
32	e_0844	AUS1	r_2637	2.00E+03	2.00E+03	0.00E+00
33	e_0464	PDR11	r_2638	2.00E+03	2.00E+03	0.00E+00
34	e_0844	AUS1	r_2639	2.00E+03	2.00E+03	0.00E+00
35	e_0478	FLX1	r_2640	2.00E+03	2.00E+03	0.00E+00
36	e_0464	PDR11	r_2641	2.00E+03	2.00E+03	0.00E+00
37	e_0844	AUS1	r_2642	2.00E+03	2.00E+03	0.00E+00
38	e_0464	PDR11	r_2643	2.00E+03	2.00E+03	0.00E+00
39	e_0844	AUS1	r_2644	2.00E+03	2.00E+03	0.00E+00
40	e_0351	VRG4	r_2645	2.00E+03	2.00E+03	0.00E+00
41	e_0162	HXT15	r_2646	2.00E+03	2.00E+03	0.00E+00
42	e_0163	MPH2	r_2647	2.00E+03	2.00E+03	0.00E+00
43	e_0215	HXT7	r_2648	2.00E+03	2.00E+03	0.00E+00
44	e_0216	HXT6	r_2649	2.00E+03	2.00E+03	0.00E+00
45	e_0217	HXT3	r_2650	2.00E+03	2.00E+03	0.00E+00
46	e_0246	STL1	r_2651	2.00E+03	2.00E+03	0.00E+00
47	e_0267	HXT13	r_2652	2.00E+03	2.00E+03	0.00E+00
48	e_0309	HXT10	r_2653	2.00E+03	2.00E+03	0.00E+00
49	e_0444	HXT4	r_2654	2.00E+03	2.00E+03	0.00E+00
50	e_0445	HXT1	r_2655	2.00E+03	2.00E+03	0.00E+00
51	e_0446	HXT5	r_2656	2.00E+03	2.00E+03	0.00E+00
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2	e_0520	HXT8	r_2657	2.00E+03	2.00E+03	0.00E+00
3	e_0522	HXT9	r_2658	2.00E+03	2.00E+03	0.00E+00
4	e_0553	HXT16	r_2659	2.00E+03	2.00E+03	0.00E+00
5	e_0555	MPH3	r_2660	2.00E+03	2.00E+03	0.00E+00
6	e_0641	GAL2	r_2661	2.00E+03	2.00E+03	0.00E+00
7	e_0722	HXT2	r_2662	2.00E+03	2.00E+03	0.00E+00
8	e_0818	HXT17	r_2663	2.00E+03	2.00E+03	0.00E+00
9	e_0843	HXT11	r_2664	2.00E+03	2.00E+03	0.00E+00
10	e_0519	OPT1	r_2665	2.00E+03	2.00E+03	0.00E+00
11	e_0183	YCF1	r_2666	2.00E+03	2.00E+03	0.00E+00
12	e_0614	BPT1	r_2667	2.00E+03	2.00E+03	0.00E+00
13	e_0125	GIT1	r_2668	2.00E+03	2.00E+03	0.00E+00
14	e_0125	GIT1	r_2669	2.00E+03	2.00E+03	0.00E+00
15	e_0246	STL1	r_2670	2.00E+03	2.00E+03	0.00E+00
16	e_0338	GUP1	r_2671	2.00E+03	2.00E+03	0.00E+00
17	e_0929	GUP2	r_2672	2.00E+03	2.00E+03	0.00E+00
18	e_0620	FPS1	r_2673	2.00E+03	2.00E+03	0.00E+00
19	e_0102	AGP1	r_2674	2.00E+03	2.00E+03	0.00E+00
20	e_0600	GAP1	r_2675	2.00E+03	2.00E+03	0.00E+00
21	e_0821	TAT2	r_2676	2.00E+03	2.00E+03	0.00E+00
22	e_0896	PUT4	r_2677	2.00E+03	2.00E+03	0.00E+00
23	e_0942	DIP5	r_2678	2.00E+03	2.00E+03	0.00E+00
24	e_0157	GGC1	r_2679	2.00E+03	2.00E+03	0.00E+00
25	e_0284	FCY2	r_2680	2.00E+03	2.00E+03	0.00E+00
26	e_0285	FCY21	r_2681	2.00E+03	2.00E+03	0.00E+00
27	e_0286	FCY22	r_2682	2.00E+03	2.00E+03	0.00E+00
28	e_0345	TPN1	r_2683	2.00E+03	2.00E+03	0.00E+00
29	e_0238	ITR1	r_2684	2.00E+03	2.00E+03	0.00E+00
30	e_0837	ITR2	r_2685	2.00E+03	2.00E+03	0.00E+00
31	e_0055	BAP2	r_2686	2.00E+03	2.00E+03	0.00E+00
32	e_0102	AGP1	r_2687	2.00E+03	2.00E+03	0.00E+00
33	e_0173	BAP3	r_2688	2.00E+03	2.00E+03	0.00E+00
34	e_0600	GAP1	r_2689	2.00E+03	2.00E+03	0.00E+00
35	e_0821	TAT2	r_2690	2.00E+03	2.00E+03	0.00E+00
36	e_0896	PUT4	r_2691	2.00E+03	2.00E+03	0.00E+00
37	e_0942	DIP5	r_2692	2.00E+03	2.00E+03	0.00E+00
38	e_0266	CAN1	r_2693	2.00E+03	2.00E+03	0.00E+00
39	e_0600	GAP1	r_2694	2.00E+03	2.00E+03	0.00E+00
40	e_0798	ALP1	r_2695	2.00E+03	2.00E+03	0.00E+00
41	e_0094	VBA2	r_2696	2.00E+03	2.00E+03	0.00E+00
42	e_0102	AGP1	r_2697	2.00E+03	2.00E+03	0.00E+00
43	e_0241	GNP1	r_2698	2.00E+03	2.00E+03	0.00E+00
44	e_0600	GAP1	r_2699	2.00E+03	2.00E+03	0.00E+00
45	e_0942	DIP5	r_2700	2.00E+03	2.00E+03	0.00E+00
46	e_0524	AVT1	r_2701	2.00E+03	2.00E+03	0.00E+00
47	e_0580	AVT3	r_2702	2.00E+03	2.00E+03	0.00E+00
48	e_0777	AVT4	r_2703	2.00E+03	2.00E+03	0.00E+00
49	e_0300	AVT6	r_2704	2.00E+03	2.00E+03	0.00E+00
50	e_0316	AGP3	r_2705	2.00E+03	2.00E+03	0.00E+00
51	e_0600	GAP1	r_2706	2.00E+03	2.00E+03	0.00E+00
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2	e_0942	DIP5	r_2707	2.00E+03	2.00E+03	0.00E+00
3	e_0068	AGP2	r_2708	2.00E+03	2.00E+03	0.00E+00
4	e_0055	BAP2	r_2709	2.00E+03	2.00E+03	0.00E+00
5	e_0056	TAT1	r_2710	2.00E+03	2.00E+03	0.00E+00
6	e_0102	AGP1	r_2711	2.00E+03	2.00E+03	0.00E+00
7	e_0173	BAP3	r_2712	2.00E+03	2.00E+03	0.00E+00
8	e_0241	GNP1	r_2713	2.00E+03	2.00E+03	0.00E+00
9	e_0600	GAP1	r_2714	2.00E+03	2.00E+03	0.00E+00
10	e_0821	TAT2	r_2715	2.00E+03	2.00E+03	0.00E+00
11	e_0123	ERS1	r_2716	2.00E+03	2.00E+03	0.00E+00
12	e_0951	AGC1	r_2717	2.00E+03	2.00E+03	0.00E+00
13	e_0300	AVT6	r_2718	2.00E+03	2.00E+03	0.00E+00
14	e_0102	AGP1	r_2719	2.00E+03	2.00E+03	0.00E+00
15	e_0316	AGP3	r_2720	2.00E+03	2.00E+03	0.00E+00
16	e_0600	GAP1	r_2721	2.00E+03	2.00E+03	0.00E+00
17	e_0942	DIP5	r_2722	2.00E+03	2.00E+03	0.00E+00
18	e_0524	AVT1	r_2723	2.00E+03	2.00E+03	0.00E+00
19	e_0580	AVT3	r_2724	2.00E+03	2.00E+03	0.00E+00
20	e_0777	AVT4	r_2725	2.00E+03	2.00E+03	0.00E+00
21	e_0102	AGP1	r_2726	2.00E+03	2.00E+03	0.00E+00
22	e_0241	GNP1	r_2727	2.00E+03	2.00E+03	0.00E+00
23	e_0600	GAP1	r_2728	2.00E+03	2.00E+03	0.00E+00
24	e_0942	DIP5	r_2729	2.00E+03	2.00E+03	0.00E+00
25	e_0094	VBA2	r_2730	2.00E+03	2.00E+03	0.00E+00
26	e_0110	VBA3	r_2731	2.00E+03	2.00E+03	0.00E+00
27	e_0731	VBA1	r_2732	2.00E+03	2.00E+03	0.00E+00
28	e_0056	TAT1	r_2733	2.00E+03	2.00E+03	0.00E+00
29	e_0391	HIP1	r_2734	2.00E+03	2.00E+03	0.00E+00
30	e_0600	GAP1	r_2735	2.00E+03	2.00E+03	0.00E+00
31	e_0105	ATG22	r_2736	2.00E+03	2.00E+03	0.00E+00
32	e_0524	AVT1	r_2737	2.00E+03	2.00E+03	0.00E+00
33	e_0580	AVT3	r_2738	2.00E+03	2.00E+03	0.00E+00
34	e_0777	AVT4	r_2739	2.00E+03	2.00E+03	0.00E+00
35	e_0055	BAP2	r_2740	2.00E+03	2.00E+03	0.00E+00
36	e_0056	TAT1	r_2741	2.00E+03	2.00E+03	0.00E+00
37	e_0102	AGP1	r_2742	2.00E+03	2.00E+03	0.00E+00
38	e_0173	BAP3	r_2743	2.00E+03	2.00E+03	0.00E+00
39	e_0600	GAP1	r_2744	2.00E+03	2.00E+03	0.00E+00
40	e_0597	JEN1	r_2745	2.00E+03	2.00E+03	0.00E+00
41	e_0596	JEN1	r_2746	2.00E+03	2.00E+03	0.00E+00
42	e_0105	ATG22	r_2747	2.00E+03	2.00E+03	0.00E+00
43	e_0524	AVT1	r_2748	2.00E+03	2.00E+03	0.00E+00
44	e_0580	AVT3	r_2749	2.00E+03	2.00E+03	0.00E+00
45	e_0777	AVT4	r_2750	2.00E+03	2.00E+03	0.00E+00
46	e_0055	BAP2	r_2751	2.00E+03	2.00E+03	0.00E+00
47	e_0056	TAT1	r_2752	2.00E+03	2.00E+03	0.00E+00
48	e_0102	AGP1	r_2753	2.00E+03	2.00E+03	0.00E+00
49	e_0173	BAP3	r_2754	2.00E+03	2.00E+03	0.00E+00
50	e_0241	GNP1	r_2755	2.00E+03	2.00E+03	0.00E+00
51	e_0600	GAP1	r_2756	2.00E+03	2.00E+03	0.00E+00
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2	e_0094	VBA2	r_2757	2.00E+03	2.00E+03	0.00E+00
3	e_0110	VBA3	r_2758	2.00E+03	2.00E+03	0.00E+00
4	e_0731	VBA1	r_2759	2.00E+03	2.00E+03	0.00E+00
5	e_0600	GAP1	r_2760	2.00E+03	2.00E+03	0.00E+00
6	e_0797	LYP1	r_2761	2.00E+03	2.00E+03	0.00E+00
7	e_0055	BAP2	r_2762	2.00E+03	2.00E+03	0.00E+00
8	e_0102	AGP1	r_2763	2.00E+03	2.00E+03	0.00E+00
9	e_0173	BAP3	r_2764	2.00E+03	2.00E+03	0.00E+00
10	e_0241	GNP1	r_2765	2.00E+03	2.00E+03	0.00E+00
11	e_0366	MUP1	r_2766	2.00E+03	2.00E+03	0.00E+00
12	e_0421	MUP3	r_2767	2.00E+03	2.00E+03	0.00E+00
13	e_0600	GAP1	r_2768	2.00E+03	2.00E+03	0.00E+00
14	e_0055	BAP2	r_2769	2.00E+03	2.00E+03	0.00E+00
15	e_0102	AGP1	r_2770	2.00E+03	2.00E+03	0.00E+00
16	e_0173	BAP3	r_2771	2.00E+03	2.00E+03	0.00E+00
17	e_0600	GAP1	r_2772	2.00E+03	2.00E+03	0.00E+00
18	e_0821	TAT2	r_2773	2.00E+03	2.00E+03	0.00E+00
19	e_0600	GAP1	r_2774	2.00E+03	2.00E+03	0.00E+00
20	e_0896	PUT4	r_2775	2.00E+03	2.00E+03	0.00E+00
21	e_0102	AGP1	r_2776	2.00E+03	2.00E+03	0.00E+00
22	e_0241	GNP1	r_2777	2.00E+03	2.00E+03	0.00E+00
23	e_0316	AGP3	r_2778	2.00E+03	2.00E+03	0.00E+00
24	e_0600	GAP1	r_2779	2.00E+03	2.00E+03	0.00E+00
25	e_0942	DIP5	r_2780	2.00E+03	2.00E+03	0.00E+00
26	e_0056	TAT1	r_2781	2.00E+03	2.00E+03	0.00E+00
27	e_0102	AGP1	r_2782	2.00E+03	2.00E+03	0.00E+00
28	e_0173	BAP3	r_2783	2.00E+03	2.00E+03	0.00E+00
29	e_0241	GNP1	r_2784	2.00E+03	2.00E+03	0.00E+00
30	e_0600	GAP1	r_2785	2.00E+03	2.00E+03	0.00E+00
31	e_0055	BAP2	r_2786	2.00E+03	2.00E+03	0.00E+00
32	e_0056	TAT1	r_2787	2.00E+03	2.00E+03	0.00E+00
33	e_0173	BAP3	r_2788	2.00E+03	2.00E+03	0.00E+00
34	e_0600	GAP1	r_2789	2.00E+03	2.00E+03	0.00E+00
35	e_0821	TAT2	r_2790	2.00E+03	2.00E+03	0.00E+00
36	e_0105	ATG22	r_2791	2.00E+03	2.00E+03	0.00E+00
37	e_0094	VBA2	r_2792	2.00E+03	2.00E+03	0.00E+00
38	e_0524	AVT1	r_2793	2.00E+03	2.00E+03	0.00E+00
39	e_0580	AVT3	r_2794	2.00E+03	2.00E+03	0.00E+00
40	e_0777	AVT4	r_2795	2.00E+03	2.00E+03	0.00E+00
41	e_0055	BAP2	r_2796	2.00E+03	2.00E+03	0.00E+00
42	e_0056	TAT1	r_2797	2.00E+03	2.00E+03	0.00E+00
43	e_0102	AGP1	r_2798	2.00E+03	2.00E+03	0.00E+00
44	e_0173	BAP3	r_2799	2.00E+03	2.00E+03	0.00E+00
45	e_0600	GAP1	r_2800	2.00E+03	2.00E+03	0.00E+00
46	e_0821	TAT2	r_2801	2.00E+03	2.00E+03	0.00E+00
47	e_0055	BAP2	r_2802	2.00E+03	2.00E+03	0.00E+00
48	e_0056	TAT1	r_2803	2.00E+03	2.00E+03	0.00E+00
49	e_0102	AGP1	r_2804	2.00E+03	2.00E+03	0.00E+00
50	e_0173	BAP3	r_2805	2.00E+03	2.00E+03	0.00E+00
51	e_0600	GAP1	r_2806	2.00E+03	2.00E+03	0.00E+00
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2	e_0464	PDR11	r_2807	2.00E+03	2.00E+03	0.00E+00
3	e_0844	AUS1	r_2808	2.00E+03	2.00E+03	0.00E+00
4	e_0683	DIC1	r_2809	2.00E+03	2.00E+03	0.00E+00
5	e_0097	MAL31	r_2810	2.00E+03	2.00E+03	0.00E+00
6	e_0163	MPH2	r_2811	2.00E+03	2.00E+03	0.00E+00
7	e_0415	MAL11	r_2820	4.80E-05	1.71E-04	0.00E+00
8	e_0555	MPH3	r_2821	4.80E-05	1.71E-04	0.00E+00
9	e_0076	DTR1	r_2822	4.80E-05	1.71E-04	0.00E+00
10	e_0247	YEA6	r_2823	4.80E-05	1.71E-04	0.00E+00
11	e_0461	YIA6	r_2824	4.80E-05	1.71E-04	0.00E+00
12	e_0461	YIA6	r_2825	4.80E-05	1.71E-04	0.00E+00
13	e_0461	YIA6	r_2826	4.80E-05	1.71E-04	0.00E+00
14	e_0461	YIA6	r_2827	4.80E-05	1.71E-04	0.00E+00
15	e_0408	TNA1	r_2828	0.00E+00	0.00E+00	0.00E+00
16	e_0924	PXA1	r_2829	0.00E+00	0.00E+00	0.00E+00
17	e_0861	ORT1	r_2830	0.00E+00	0.00E+00	0.00E+00
18	e_0266	CAN1	r_2831	0.00E+00	0.00E+00	0.00E+00
19	e_0600	GAP1	r_2832	0.00E+00	0.00E+00	0.00E+00
20	e_0575	OAC1	r_2833	0.00E+00	0.00E+00	0.00E+00
21	e_0116	FEN2	r_2834	0.00E+00	0.00E+00	0.00E+00
22	e_0096	PHO89	r_2835	0.00E+00	0.00E+00	0.00E+00
23	e_0120	PHO87	r_2836	4.80E-05	1.71E-04	0.00E+00
24	e_0517	PHO90	r_2837	4.80E-05	1.71E-04	0.00E+00
25	e_0715	PHO84	r_2838	4.80E-05	1.71E-04	0.00E+00
26	e_0807	PHO91	r_2839	4.80E-05	1.71E-04	0.00E+00
27	e_0282	PIC2	r_2840	4.80E-05	1.71E-04	0.00E+00
28	e_0537	MIR1	r_2841	4.80E-05	1.71E-04	0.00E+00
29	e_0507	TRK1	r_2842	4.80E-05	1.71E-04	0.00E+00
30	e_0584	TPO5	r_2843	4.80E-05	1.71E-04	0.00E+00
31	e_0616	TPO1	r_2844	2.40E-05	8.54E-05	0.00E+00
32	e_0885	TPO4	r_2845	2.40E-05	8.54E-05	0.00E+00
33	e_0617	TPO1	r_2846	2.40E-05	8.54E-05	0.00E+00
34	e_0886	TPO4	r_2847	2.40E-05	8.54E-05	0.00E+00
35	e_0345	TPN1	r_2848	2.40E-05	8.54E-05	0.00E+00
36	e_0596	JEN1	r_2849	2.40E-05	8.54E-05	0.00E+00
37	e_0946	SAM3	r_2850	2.40E-05	8.54E-05	0.00E+00
38	e_0768	PET8	r_2851	2.40E-05	8.54E-05	0.00E+00
39	e_0624	MMP1	r_2852	4.80E-05	1.71E-04	0.00E+00
40	e_0648	NHA1	r_2853	4.80E-05	1.71E-04	0.00E+00
41	e_0584	TPO5	r_2854	4.80E-05	1.71E-04	0.00E+00
42	e_0068	AGP2	r_2855	4.80E-05	1.71E-04	0.00E+00
43	e_0419	DUR3	r_2856	4.80E-05	1.71E-04	0.00E+00
44	e_0600	GAP1	r_2857	4.80E-05	1.71E-04	0.00E+00
45	e_0616	TPO1	r_2858	4.80E-05	1.71E-04	0.00E+00
46	e_0885	TPO4	r_2859	4.80E-05	1.71E-04	0.00E+00
47	e_0946	SAM3	r_2860	2.40E-05	8.54E-05	0.00E+00
48	e_0617	TPO1	r_2861	2.40E-05	8.54E-05	0.00E+00
49	e_0886	TPO4	r_2862	2.40E-05	8.54E-05	0.00E+00
50	e_0377	TPO2	r_2863	2.40E-05	8.54E-05	0.00E+00
51	e_0616	TPO1	r_2864	2.40E-05	8.54E-05	0.00E+00
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2	e_0885	TPO4	r_2865	2.40E-05	8.54E-05	0.00E+00
3	e_0971	TPO3	r_2866	2.40E-05	8.54E-05	0.00E+00
4	e_0378	TPO2	r_2867	2.40E-05	8.54E-05	0.00E+00
5	e_0617	TPO1	r_2868	4.80E-05	1.71E-04	0.00E+00
6	e_0886	TPO4	r_2869	4.80E-05	1.71E-04	0.00E+00
7	e_0972	TPO3	r_2870	4.80E-05	1.71E-04	0.00E+00
8	e_0683	DIC1	r_2871	4.80E-05	1.71E-04	0.00E+00
9	e_0539	SFC1	r_2872	4.80E-05	1.71E-04	0.00E+00
10	e_0095	SUL1	r_2873	4.80E-05	1.71E-04	0.00E+00
11	e_0643	SUL2	r_2874	4.80E-05	1.71E-04	0.00E+00
12	e_0917	SSU1	r_2875	4.80E-05	1.71E-04	0.00E+00
13	e_0374	TPC1	r_2876	4.80E-05	1.71E-04	0.00E+00
14	e_0664	THI7	r_2877	4.80E-05	1.71E-04	0.00E+00
15	e_0849	NRT1	r_2878	4.80E-05	1.71E-04	0.00E+00
16	e_0874	THI72	r_2879	4.80E-05	1.71E-04	0.00E+00
17	e_0937	HUT1	r_2880	4.80E-05	1.71E-04	0.00E+00
18	e_0042	FUR4	r_2881	4.80E-05	1.71E-04	0.00E+00
19	e_0419	DUR3	r_2882	4.80E-05	1.71E-04	0.00E+00
20	e_0027	FUI1	r_2883	4.80E-05	1.71E-04	0.00E+00
21	e_0078	RIM2	r_2884	2.00E+03	2.00E+03	3.80E-04
22	e_0078	RIM2	r_2885	2.00E+03	2.00E+03	0.00E+00
23	e_0622	AQY2	r_2886	2.00E+03	2.00E+03	0.00E+00
24	e_0979	AQY1	r_2887	2.00E+03	2.00E+03	0.00E+00
25	e_0464	PDR11	r_2888	2.00E+03	2.00E+03	3.80E-04
26	e_0844	AUS1	r_2889	2.00E+03	2.00E+03	0.00E+00
27	e_1054	FRE1	r_2890	2.00E+03	2.00E+03	0.00E+00
28	e_1055	FRE2	r_2891	2.00E+03	2.00E+03	0.00E+00
29	e_1055	FRE2	r_2892	2.00E+03	2.00E+03	0.00E+00
30	e_1056	FET3	r_2893	2.00E+03	2.00E+03	0.00E+00
31	e_1068	ATX1	r_2894	2.00E+03	2.00E+03	0.00E+00
32	e_1069	CCC2	r_2895	2.00E+03	2.00E+03	0.00E+00
33	e_1057	FTR1	r_2896	2.00E+03	2.00E+03	0.00E+00
34	e_0767	FET4	r_2897	2.00E+03	2.00E+03	0.00E+00
35	e_0767	FET4	r_2898	2.00E+03	2.00E+03	0.00E+00
36	e_1058	CTR1	r_2899	2.00E+03	2.00E+03	0.00E+00
37	e_1060	YFH1	r_2900	2.00E+03	2.00E+03	0.00E+00
38	e_1061	MRS3	r_2901	2.00E+03	2.00E+03	0.00E+00
39	e_1062	MRS4	r_2902	2.00E+03	2.00E+03	0.00E+00
40	e_1063	CCC1	r_2903	2.00E+03	2.00E+03	0.00E+00
41	e_1064	FRE6	r_2904	2.00E+03	2.00E+03	0.00E+00
42	e_1065	SMF3	r_2905	2.00E+03	2.00E+03	0.00E+00
43	e_1071	FRE5	r_2906	2.00E+03	2.00E+03	0.00E+00
44	e_1066	FET5	r_2907	2.00E+03	2.00E+03	0.00E+00
45	e_1067	FTH1	r_2908	2.00E+03	2.00E+03	0.00E+00
46	e_1072	HMX1	r_2909	2.00E+03	2.00E+03	0.00E+00
47	e_1073	BPT1	r_2910	2.00E+03	2.00E+03	0.00E+00
48	e_1074	YCF1	r_2911	2.00E+03	2.00E+03	0.00E+00
49	e_1075	ARN1	r_2912	2.00E+03	2.00E+03	0.00E+00
50	e_1077	ARN3	r_2913	2.00E+03	2.00E+03	0.00E+00
51	e_1075	ARN1	r_2914	2.00E+03	2.00E+03	0.00E+00
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2	e_1077	ARN3	r_2915	2.00E+03	2.00E+03	0.00E+00
3	e_1076	ARN2	r_2916	2.00E+03	2.00E+03	0.00E+00
4	e_1078	ARN4	r_2917	2.00E+03	2.00E+03	0.00E+00
5	e_1077	ARN3	r_2918	2.00E+03	2.00E+03	0.00E+00
6	e_1054	FRE1	r_2919	2.00E+03	2.00E+03	0.00E+00
7	e_1055	FRE2	r_2920	2.00E+03	2.00E+03	0.00E+00
8	e_1079	FRE3	r_2921	2.00E+03	2.00E+03	0.00E+00
9	e_1080	FRE4	r_2922	2.00E+03	2.00E+03	0.00E+00
10	e_1081	FIT1	r_2923	2.00E+03	2.00E+03	0.00E+00
11	e_1082	FIT2	r_2924	2.00E+03	2.00E+03	0.00E+00
12	e_1083	FIT3	r_2925	2.00E+03	2.00E+03	0.00E+00
13	e_1054	FRE1	r_2926	2.00E+03	2.00E+03	0.00E+00
14	e_1055	FRE2	r_2927	2.00E+03	2.00E+03	0.00E+00
15	e_1079	FRE3	r_2928	2.00E+03	2.00E+03	0.00E+00
16	e_1080	FRE4	r_2929	2.00E+03	2.00E+03	0.00E+00
17	e_1081	FIT1	r_2930	2.00E+03	2.00E+03	0.00E+00
18	e_1082	FIT2	r_2931	2.00E+03	2.00E+03	0.00E+00
19	e_1083	FIT3	r_2932	2.00E+03	2.00E+03	0.00E+00
20	e_1054	FRE1	r_2933	2.00E+03	2.00E+03	0.00E+00
21	e_1055	FRE2	r_2934	2.00E+03	2.00E+03	0.00E+00
22	e_1079	FRE3	r_2935	2.00E+03	2.00E+03	0.00E+00
23	e_1080	FRE4	r_2936	2.00E+03	2.00E+03	0.00E+00
24	e_1081	FIT1	r_2937	2.00E+03	2.00E+03	0.00E+00
25	e_1082	FIT2	r_2938	2.00E+03	2.00E+03	0.00E+00
26	e_1083	FIT3	r_2939	2.00E+03	2.00E+03	0.00E+00
27	e_1054	FRE1	r_2940	2.00E+03	2.00E+03	0.00E+00
28	e_1055	FRE2	r_2941	2.00E+03	2.00E+03	0.00E+00
29	e_1079	FRE3	r_2942	2.00E+03	2.00E+03	0.00E+00
30	e_1080	FRE4	r_2943	2.00E+03	2.00E+03	0.00E+00
31	e_1081	FIT1	r_2944	2.00E+03	2.00E+03	0.00E+00
32	e_1082	FIT2	r_2945	2.00E+03	2.00E+03	0.00E+00
33	e_1083	FIT3	r_2946	2.00E+03	2.00E+03	0.00E+00
34	e_1054	FRE1	r_2947	2.00E+03	2.00E+03	0.00E+00
35	e_1055	FRE2	r_2948	2.00E+03	2.00E+03	3.80E-04
36	e_1079	FRE3	r_2949	2.00E+03	2.00E+03	0.00E+00
37	e_1080	FRE4	r_2950	2.00E+03	2.00E+03	0.00E+00
38	e_1081	FIT1	r_2951	2.00E+03	2.00E+03	0.00E+00
39	e_1082	FIT2	r_2952	2.00E+03	2.00E+03	3.80E-04
40	e_1083	FIT3	r_2953	2.00E+03	2.00E+03	0.00E+00
41	e_1087	NFS1	r_2954	2.00E+03	2.00E+03	0.00E+00
42	e_1088	ISD11	r_2955	2.00E+03	2.00E+03	0.00E+00
43	e_0222	ARH1	r_2956	2.00E+03	2.00E+03	0.00E+00
44	e_0938	YAH1	r_2957	2.00E+03	2.00E+03	0.00E+00
45	e_1060	YFH1	r_2958	2.00E+03	2.00E+03	0.00E+00
46	e_1084	NFU1	r_2959	2.00E+03	2.00E+03	0.00E+00
47	e_1085	ISU1	r_2960	2.00E+03	2.00E+03	0.00E+00
48	e_1086	ISU2	r_2961	2.00E+03	2.00E+03	0.00E+00
49	e_0222	ARH1	r_2962	2.00E+03	2.00E+03	0.00E+00
50	e_0938	YAH1	r_2963	2.00E+03	2.00E+03	0.00E+00
51	e_1060	YFH1	r_2964	2.00E+03	2.00E+03	0.00E+00
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2	e_1085	ISU1	r_2965	2.00E+03	2.00E+03	0.00E+00
3	e_1086	ISU2	r_2966	2.00E+03	2.00E+03	0.00E+00
4	e_0910	GRX5	r_2967	2.00E+03	2.00E+03	0.00E+00
5	e_1089	SSQ1	r_2968	2.00E+03	2.00E+03	0.00E+00
6	e_1090	JAC1	r_2969	2.00E+03	2.00E+03	0.00E+00
7	e_1091	MGE1	r_2970	2.00E+03	2.00E+03	0.00E+00
8	e_0910	GRX5	r_2971	2.00E+03	2.00E+03	0.00E+00
9	e_1089	SSQ1	r_2972	2.00E+03	2.00E+03	0.00E+00
10	e_1090	JAC1	r_2973	2.00E+03	2.00E+03	0.00E+00
11	e_1091	MGE1	r_2974	2.00E+03	2.00E+03	0.00E+00
12	e_1092	SSC1	r_2975	2.00E+03	2.00E+03	0.00E+00
13	e_0910	GRX5	r_2976	2.00E+03	2.00E+03	0.00E+00
14	e_1089	SSQ1	r_2977	2.00E+03	2.00E+03	0.00E+00
15	e_1090	JAC1	r_2978	2.00E+03	2.00E+03	0.00E+00
16	e_1091	MGE1	r_2979	2.00E+03	2.00E+03	0.00E+00
17	e_1092	SSC1	r_2980	2.00E+03	2.00E+03	0.00E+00
18	e_1093	ISA1	r_2981	2.00E+03	2.00E+03	0.00E+00
19	e_1094	ISA2	r_2982	2.00E+03	2.00E+03	0.00E+00
20	e_1095	IBA57	r_2983	2.00E+03	2.00E+03	0.00E+00
21	e_1084	NFU1	r_2984	2.00E+03	2.00E+03	0.00E+00
22	e_1093	ISA1	r_2985	2.00E+03	2.00E+03	0.00E+00
23	e_1094	ISA2	r_2986	2.00E+03	2.00E+03	0.00E+00
24	e_1095	IBA57	r_2987	2.00E+03	2.00E+03	0.00E+00
25	e_1096	ATM1	r_2988	2.00E+03	2.00E+03	0.00E+00
26	e_1097	ERV1	r_2989	2.00E+03	2.00E+03	0.00E+00
27	e_0181	GRX3	r_2990	2.00E+03	2.00E+03	0.00E+00
28	e_0304	GRX4	r_2991	2.00E+03	2.00E+03	0.00E+00
29	e_1098	CFD1	r_2992	2.00E+03	2.00E+03	0.00E+00
30	e_1099	NBP35	r_2993	2.00E+03	2.00E+03	0.00E+00
31	e_1100	DRE2	r_2994	2.00E+03	2.00E+03	0.00E+00
32	e_1101	TAH18	r_2995	2.00E+03	2.00E+03	0.00E+00
33	e_1070	GRX4	r_2996	2.00E+03	2.00E+03	0.00E+00
34	e_1106	CFD1	r_2997	2.00E+03	2.00E+03	0.00E+00
35	e_1107	NBP35	r_2998	2.00E+03	2.00E+03	0.00E+00
36	e_1108	DRE2	r_2999	2.00E+03	2.00E+03	0.00E+00
37	e_1109	TAH18	r_3000	2.00E+03	2.00E+03	0.00E+00
38	e_1118	GRX3	r_3001	2.00E+03	2.00E+03	0.00E+00
39	e_1102	CIA1	r_3002	2.00E+03	2.00E+03	0.00E+00
40	e_1103	CIA2	r_3003	2.00E+03	2.00E+03	0.00E+00
41	e_1104	MET18	r_3004	2.00E+03	2.00E+03	0.00E+00
42	e_1105	NAR1	r_3005	2.00E+03	2.00E+03	0.00E+00
43	e_1110	CIA1	r_3006	2.00E+03	2.00E+03	0.00E+00
44	e_1111	CIA2	r_3007	2.00E+03	2.00E+03	0.00E+00
45	e_1112	MET18	r_3008	2.00E+03	2.00E+03	0.00E+00
46	e_1113	NAR1	r_3009	2.00E+03	2.00E+03	0.00E+00
47	e_1096	ATM1	r_3010	2.00E+03	2.00E+03	0.00E+00
48	e_0181	GRX3	r_3011	2.00E+03	2.00E+03	0.00E+00
49	e_0304	GRX4	r_3022	2.74E-05	9.77E-05	0.00E+00
50	e_1115	PSE1	r_3023	2.74E-05	9.77E-05	0.00E+00
51	e_1114	MSN5	r_3024	2.74E-05	9.77E-05	0.00E+00
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2	e_1116	AFT1	r_3025	2.74E-05	9.77E-05	0.00E+00
3	e_1117	AFT2	r_3026	2.74E-05	9.77E-05	0.00E+00
4	e_1119	CYC3	r_3027	2.74E-05	9.77E-05	0.00E+00
5	e_1120	CYT2	r_3028	2.74E-05	9.77E-05	0.00E+00
6	e_1053	melibiose	r_3029	2.74E-05	9.77E-05	0.00E+00
7	e_0145	LYS21	r_3030	1.13E-05	3.97E-05	0.00E+00
8	e_0153	LYS20	r_3031	1.13E-05	3.97E-05	0.00E+00
9	e_0253	BUD16	r_3032	1.13E-05	3.97E-05	0.00E+00
10	e_0981	FMP37	r_3033	1.13E-05	3.97E-05	0.00E+00
11	e_0982	FMP43	r_3034	1.07E-05	3.78E-05	0.00E+00
12	e_0983	MPC2	r_3035	1.07E-05	3.78E-05	0.00E+00
13	e_0415	MAL11	r_3036	1.07E-05	3.78E-05	0.00E+00
14	e_0496	BNA3	r_3037	1.07E-05	3.78E-05	0.00E+00
15	e_0069	ADH5	r_3038	1.07E-05	3.78E-05	0.00E+00
16	e_0834	ADH1	r_3039	1.07E-05	3.78E-05	0.00E+00
17	e_0740	ALD2	r_3040	1.07E-05	3.78E-05	0.00E+00
18	e_0451	ARO9	r_3041	1.07E-05	3.78E-05	0.00E+00
19	e_0451	ARO9	r_3042	1.07E-05	3.78E-05	0.00E+00
20	e_0451	ARO9	r_3043	1.07E-05	3.78E-05	0.00E+00
21	e_0601	SHB17	r_3044	1.07E-05	3.78E-05	0.00E+00
22	e_0135	IDP1	r_3045	1.07E-05	3.78E-05	0.00E+00
23	e_0879	ODC2	r_3046	0.00E+00	0.00E+00	0.00E+00
24	e_0923	ODC1	r_3047	0.00E+00	0.00E+00	0.00E+00
25	e_0586	FAS1	r_3048	0.00E+00	0.00E+00	0.00E+00
26	e_0934	FAS2	r_3049	0.00E+00	0.00E+00	0.00E+00
27	e_0586	FAS1	r_3050	0.00E+00	0.00E+00	0.00E+00
28	e_0934	FAS2	r_3051	0.00E+00	0.00E+00	0.00E+00
29	e_0287	CEM1	r_3052	0.00E+00	0.00E+00	0.00E+00
30	e_0287	CEM1	r_3053	0.00E+00	0.00E+00	0.00E+00
31	e_0287	CEM1	r_3054	0.00E+00	0.00E+00	0.00E+00
32	e_0566	OAR1	r_3055	0.00E+00	0.00E+00	0.00E+00
33	e_0566	OAR1	r_3056	0.00E+00	0.00E+00	0.00E+00
34	e_0566	OAR1	r_3057	0.00E+00	0.00E+00	0.00E+00
35	e_0438	HTD2	r_3058	0.00E+00	0.00E+00	0.00E+00
36	e_0438	HTD2	r_3059	0.00E+00	0.00E+00	0.00E+00
37	e_0438	HTD2	r_3060	0.00E+00	0.00E+00	0.00E+00
38	e_0044	ETR1	r_3061	0.00E+00	0.00E+00	0.00E+00
39	e_0044	ETR1	r_3062	0.00E+00	0.00E+00	0.00E+00
40	e_0044	ETR1	r_3063	0.00E+00	0.00E+00	0.00E+00
41	e_0986	ELO1	r_3064	0.00E+00	0.00E+00	0.00E+00
42	e_0986	ELO1	r_3065	0.00E+00	0.00E+00	0.00E+00
43	e_0987	FEN1	r_3066	0.00E+00	0.00E+00	0.00E+00
44	e_0987	FEN1	r_3067	0.00E+00	0.00E+00	0.00E+00
45	e_0988	SUR4	r_3068	0.00E+00	0.00E+00	0.00E+00
46	e_0987	FEN1	r_3069	0.00E+00	0.00E+00	0.00E+00
47	e_0988	SUR4	r_3070	1.14E-06	4.06E-06	0.00E+00
48	e_0987	FEN1	r_3071	1.14E-06	4.06E-06	0.00E+00
49	e_0988	SUR4	r_3072	1.14E-06	4.06E-06	0.00E+00
50	e_0988	SUR4	r_3073	1.14E-06	4.06E-06	0.00E+00
51	e_0989	IFA38	r_3074	1.14E-06	4.06E-06	0.00E+00
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2	e_0989	IFA38	r_3075	1.14E-06	4.06E-06	0.00E+00
3	e_0989	IFA38	r_3076	1.14E-06	4.06E-06	0.00E+00
4	e_0989	IFA38	r_3077	1.14E-06	4.06E-06	0.00E+00
5	e_0989	IFA38	r_3078	1.14E-06	4.06E-06	0.00E+00
6	e_0989	IFA38	r_3079	1.14E-06	4.06E-06	0.00E+00
7	e_0989	IFA38	r_3080	1.14E-06	4.06E-06	0.00E+00
8	e_0990	PHS1	r_3081	1.14E-06	4.06E-06	0.00E+00
9	e_0990	PHS1	r_3082	0.00E+00	0.00E+00	0.00E+00
10	e_0990	PHS1	r_3083	0.00E+00	0.00E+00	0.00E+00
11	e_0990	PHS1	r_3084	0.00E+00	0.00E+00	0.00E+00
12	e_0990	PHS1	r_3085	0.00E+00	0.00E+00	0.00E+00
13	e_0990	PHS1	r_3086	0.00E+00	0.00E+00	0.00E+00
14	e_0990	PHS1	r_3087	0.00E+00	0.00E+00	0.00E+00
15	e_0991	TSC13	r_3088	0.00E+00	0.00E+00	0.00E+00
16	e_0991	TSC13	r_3089	0.00E+00	0.00E+00	0.00E+00
17	e_0991	TSC13	r_3090	0.00E+00	0.00E+00	0.00E+00
18	e_0991	TSC13	r_3091	0.00E+00	0.00E+00	0.00E+00
19	e_0991	TSC13	r_3092	0.00E+00	0.00E+00	0.00E+00
20	e_0991	TSC13	r_3093	0.00E+00	0.00E+00	0.00E+00
21	e_0991	TSC13	r_3094	0.00E+00	0.00E+00	0.00E+00
22	e_0992	OLE1	r_3095	0.00E+00	0.00E+00	0.00E+00
23	e_0992	OLE1	r_3096	0.00E+00	0.00E+00	0.00E+00
24	e_0993	FAA1	r_3097	0.00E+00	0.00E+00	0.00E+00
25	e_0993	FAA1	r_3098	5.36E-05	1.17E-04	0.00E+00
26	e_0994	FAA4	r_3099	3.69E-05	9.93E-05	0.00E+00
27	e_0993	FAA1	r_3100	4.05E-05	1.03E-04	0.00E+00
28	e_0994	FAA4	r_3101	3.69E-05	9.93E-05	0.00E+00
29	e_0993	FAA1	r_3102	4.05E-05	1.03E-04	0.00E+00
30	e_0994	FAA4	r_3103	3.69E-05	9.93E-05	0.00E+00
31	e_0993	FAA1	r_3104	4.22E-05	1.14E-04	0.00E+00
32	e_0994	FAA4	r_3105	4.22E-05	1.14E-04	0.00E+00
33	e_0993	FAA1	r_3106	4.22E-05	1.14E-04	0.00E+00
34	e_0994	FAA4	r_3107	4.22E-05	1.14E-04	0.00E+00
35	e_0995	FAA1	r_3108	4.22E-05	1.14E-04	0.00E+00
36	e_0995	FAA1	r_3109	4.22E-05	1.14E-04	0.00E+00
37	e_0996	FAA4	r_3110	4.22E-05	1.14E-04	0.00E+00
38	e_0995	FAA1	r_3111	4.22E-05	1.14E-04	0.00E+00
39	e_0996	FAA4	r_3112	2.40E-05	8.54E-05	0.00E+00
40	e_0995	FAA1	r_3113	2.40E-05	8.54E-05	0.00E+00
41	e_0996	FAA4	r_3114	2.40E-05	8.54E-05	0.00E+00
42	e_0995	FAA1	r_3115	2.40E-05	8.54E-05	0.00E+00
43	e_0996	FAA4	r_3116	2.40E-05	8.54E-05	0.00E+00
44	e_0995	FAA1	r_3117	2.40E-05	8.54E-05	0.00E+00
45	e_0996	FAA4	r_3118	2.40E-05	8.54E-05	0.00E+00
46	e_0273	FAA2	r_3119	2.40E-05	8.54E-05	0.00E+00
47	e_0273	FAA2	r_3120	2.40E-05	8.54E-05	0.00E+00
48	e_0273	FAA2	r_3121	2.40E-05	8.54E-05	0.00E+00
49	e_0997	FAA3	r_3122	2.40E-05	8.54E-05	0.00E+00
50	e_0997	FAA3	r_3123	2.40E-05	8.54E-05	0.00E+00
51	e_0997	FAA3	r_3124	2.40E-05	8.54E-05	0.00E+00
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2	e_0997	FAA3	r_3125	2.40E-05	8.54E-05	0.00E+00
3	e_0998	FAT1	r_3126	2.40E-05	8.54E-05	0.00E+00
4	e_0998	FAT1	r_3127	2.40E-05	8.54E-05	0.00E+00
5	e_0998	FAT1	r_3128	4.80E-05	1.71E-04	0.00E+00
6	e_0999	FAT1	r_3129	4.80E-05	1.71E-04	0.00E+00
7	e_0999	FAT1	r_3130	4.80E-05	1.71E-04	0.00E+00
8	e_0999	FAT1	r_3131	4.80E-05	1.71E-04	0.00E+00
9	e_0588	PXA2	r_3132	4.80E-05	1.71E-04	0.00E+00
10	e_0924	PXA1	r_3133	4.80E-05	1.71E-04	0.00E+00
11	e_0588	PXA2	r_3134	4.80E-05	1.71E-04	0.00E+00
12	e_0924	PXA1	r_3135	4.80E-05	1.71E-04	0.00E+00
13	e_0588	PXA2	r_3136	4.80E-05	1.71E-04	0.00E+00
14	e_0924	PXA1	r_3137	4.80E-05	1.71E-04	0.00E+00
15	e_0588	PXA2	r_3138	4.80E-05	1.71E-04	0.00E+00
16	e_0924	PXA1	r_3139	4.80E-05	1.71E-04	0.00E+00
17	e_0588	PXA2	r_3140	4.80E-05	1.71E-04	0.00E+00
18	e_0924	PXA1	r_3141	4.80E-05	1.71E-04	0.00E+00
19	e_0588	PXA2	r_3142	4.80E-05	1.71E-04	0.00E+00
20	e_0924	PXA1	r_3143	4.80E-05	1.71E-04	0.00E+00
21	e_0588	PXA2	r_3144	4.80E-05	1.71E-04	0.00E+00
22	e_0924	PXA1	r_3145	4.80E-05	1.71E-04	0.00E+00
23	e_0588	PXA2	r_3146	4.80E-05	1.71E-04	0.00E+00
24	e_0924	PXA1	r_3147	4.80E-05	1.71E-04	0.00E+00
25	e_0588	PXA2	r_3148	4.80E-05	1.71E-04	0.00E+00
26	e_0924	PXA1	r_3149	4.80E-05	1.71E-04	0.00E+00
27	e_0588	PXA2	r_3150	4.80E-05	1.71E-04	0.00E+00
28	e_0924	PXA1	r_3151	4.80E-05	1.71E-04	0.00E+00
29	e_0588	PXA2	r_3152	4.80E-05	1.71E-04	0.00E+00
30	e_0924	PXA1	r_3153	4.80E-05	1.71E-04	0.00E+00
31	e_0529	TES1	r_3154	4.80E-05	1.71E-04	0.00E+00
32	e_0529	TES1	r_3155	4.80E-05	1.71E-04	0.00E+00
33	e_0529	TES1	r_3156	4.80E-05	1.71E-04	0.00E+00
34	e_0529	TES1	r_3157	4.80E-05	1.71E-04	0.00E+00
35	e_0349	POX1	r_3158	4.80E-05	1.71E-04	0.00E+00
36	e_0349	POX1	r_3159	4.80E-05	1.71E-04	0.00E+00
37	e_0349	POX1	r_3160	4.80E-05	1.71E-04	0.00E+00
38	e_0349	POX1	r_3161	4.80E-05	1.71E-04	0.00E+00
39	e_0349	POX1	r_3162	4.80E-05	1.71E-04	0.00E+00
40	e_0349	POX1	r_3163	4.80E-05	1.71E-04	0.00E+00
41	e_0349	POX1	r_3164	4.80E-05	1.71E-04	0.00E+00
42	e_0349	POX1	r_3165	4.80E-05	1.71E-04	0.00E+00
43	e_0349	POX1	r_3166	4.80E-05	1.71E-04	0.00E+00
44	e_0349	POX1	r_3167	4.80E-05	1.71E-04	0.00E+00
45	e_0598	FOX2	r_3168	4.80E-05	1.71E-04	0.00E+00
46	e_0598	FOX2	r_3169	4.80E-05	1.71E-04	0.00E+00
47	e_0598	FOX2	r_3170	4.80E-05	1.71E-04	0.00E+00
48	e_0598	FOX2	r_3171	4.80E-05	1.71E-04	0.00E+00
49	e_0598	FOX2	r_3172	4.80E-05	1.71E-04	0.00E+00
50	e_0598	FOX2	r_3173	4.80E-05	1.71E-04	0.00E+00
51	e_0598	FOX2	r_3174	4.80E-05	1.71E-04	0.00E+00
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2	e_0598	FOX2	r_3175	4.80E-05	1.71E-04	0.00E+00
3	e_0598	FOX2	r_3176	2.40E-05	8.54E-05	0.00E+00
4	e_0598	FOX2	r_3177	2.40E-05	8.54E-05	0.00E+00
5	e_0598	FOX2	r_3178	2.40E-05	8.54E-05	0.00E+00
6	e_0598	FOX2	r_3179	2.40E-05	8.54E-05	0.00E+00
7	e_0598	FOX2	r_3180	2.40E-05	8.54E-05	0.00E+00
8	e_0598	FOX2	r_3181	2.40E-05	8.54E-05	0.00E+00
9	e_0598	FOX2	r_3182	2.40E-05	8.54E-05	0.00E+00
10	e_0598	FOX2	r_3183	2.40E-05	8.54E-05	0.00E+00
11	e_0598	FOX2	r_3184	2.40E-05	8.54E-05	0.00E+00
12	e_0598	FOX2	r_3185	2.40E-05	8.54E-05	0.00E+00
13	e_0598	FOX2	r_3186	2.40E-05	8.54E-05	0.00E+00
14	e_0598	FOX2	r_3187	2.40E-05	8.54E-05	0.00E+00
15	e_0598	FOX2	r_3188	2.40E-05	8.54E-05	0.00E+00
16	e_0598	FOX2	r_3189	2.40E-05	8.54E-05	0.00E+00
17	e_0598	FOX2	r_3190	2.40E-05	8.54E-05	0.00E+00
18	e_0598	FOX2	r_3191	2.40E-05	8.54E-05	0.00E+00
19	e_0598	FOX2	r_3192	4.80E-05	1.71E-04	0.00E+00
20	e_0598	FOX2	r_3193	4.80E-05	1.71E-04	0.00E+00
21	e_0598	FOX2	r_3194	4.80E-05	1.71E-04	0.00E+00
22	e_0598	FOX2	r_3195	4.80E-05	1.71E-04	0.00E+00
23	e_0598	FOX2	r_3196	4.80E-05	1.71E-04	0.00E+00
24	e_0598	FOX2	r_3197	4.80E-05	1.71E-04	0.00E+00
25	e_0598	FOX2	r_3198	4.80E-05	1.71E-04	0.00E+00
26	e_0598	FOX2	r_3199	4.80E-05	1.71E-04	0.00E+00
27	e_0598	FOX2	r_3200	4.80E-05	1.71E-04	0.00E+00
28	e_0598	FOX2	r_3201	4.80E-05	1.71E-04	0.00E+00
29	e_0598	FOX2	r_3202	4.80E-05	1.71E-04	0.00E+00
30	e_0598	FOX2	r_3203	4.80E-05	1.71E-04	0.00E+00
31	e_0481	POT1	r_3204	4.80E-05	1.71E-04	0.00E+00
32	e_0481	POT1	r_3205	4.80E-05	1.71E-04	0.00E+00
33	e_0481	POT1	r_3206	4.80E-05	1.71E-04	0.00E+00
34	e_0481	POT1	r_3207	4.80E-05	1.71E-04	0.00E+00
35	e_0481	POT1	r_3208	4.80E-05	1.71E-04	0.00E+00
36	e_0481	POT1	r_3209	4.80E-05	1.71E-04	0.00E+00
37	e_0481	POT1	r_3210	4.80E-05	1.71E-04	0.00E+00
38	e_0481	POT1	r_3211	4.80E-05	1.71E-04	0.00E+00
39	e_0481	POT1	r_3212	4.80E-05	1.71E-04	0.00E+00
40	e_0481	POT1	r_3213	4.80E-05	1.71E-04	0.00E+00
41	e_0481	POT1	r_3214	4.80E-05	1.71E-04	0.00E+00
42	e_0669	ECI1	r_3215	4.80E-05	1.71E-04	0.00E+00
43	e_0669	ECI1	r_3216	4.80E-05	1.71E-04	0.00E+00
44	e_0669	ECI1	r_3217	4.80E-05	1.71E-04	0.00E+00
45	e_0669	ECI1	r_3218	4.80E-05	1.71E-04	0.00E+00
46	e_0669	ECI1	r_3219	4.80E-05	1.71E-04	0.00E+00
47	e_0669	ECI1	r_3220	4.80E-05	1.71E-04	0.00E+00
48	e_0871	DCI1	r_3221	4.80E-05	1.71E-04	0.00E+00
49	e_0871	DCI1	r_3222	4.80E-05	1.71E-04	0.00E+00
50	e_0790	SPS19	r_3223	4.80E-05	1.71E-04	0.00E+00
51	e_0790	SPS19	r_3224	4.80E-05	1.71E-04	0.00E+00
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2	e_0675	ACO1	r_3225	4.80E-05	1.71E-04	0.00E+00
3	e_1000	GPT2	r_3226	4.80E-05	1.71E-04	0.00E+00
4	e_1001	SCT1	r_3227	4.80E-05	1.71E-04	0.00E+00
5	e_1000	GPT2	r_3228	4.80E-05	1.71E-04	0.00E+00
6	e_1001	SCT1	r_3229	4.80E-05	1.71E-04	0.00E+00
7	e_1000	GPT2	r_3230	4.80E-05	1.71E-04	0.00E+00
8	e_1000	GPT2	r_3231	4.80E-05	1.71E-04	0.00E+00
9	e_1000	GPT2	r_3232	4.80E-05	1.71E-04	0.00E+00
10	e_1001	SCT1	r_3233	4.80E-05	1.71E-04	0.00E+00
11	e_1000	GPT2	r_3234	4.80E-05	1.71E-04	0.00E+00
12	e_1001	SCT1	r_3235	4.80E-05	1.71E-04	0.00E+00
13	e_1000	GPT2	r_3236	4.80E-05	1.71E-04	0.00E+00
14	e_1000	GPT2	r_3237	4.80E-05	1.71E-04	0.00E+00
15	e_0607	GPT2	r_3238	4.80E-05	1.71E-04	0.00E+00
16	e_0607	GPT2	r_3239	4.80E-05	1.71E-04	0.00E+00
17	e_0607	GPT2	r_3240	0.00E+00	0.00E+00	0.00E+00
18	e_0607	GPT2	r_3241	0.00E+00	0.00E+00	0.00E+00
19	e_0607	GPT2	r_3242	0.00E+00	0.00E+00	0.00E+00
20	e_0607	GPT2	r_3243	0.00E+00	0.00E+00	0.00E+00
21	e_0607	GPT2	r_3244	0.00E+00	0.00E+00	0.00E+00
22	e_0607	GPT2	r_3245	0.00E+00	0.00E+00	0.00E+00
23	e_1002	AYR1	r_3246	0.00E+00	0.00E+00	0.00E+00
24	e_1002	AYR1	r_3247	0.00E+00	0.00E+00	0.00E+00
25	e_1002	AYR1	r_3248	0.00E+00	0.00E+00	0.00E+00
26	e_1002	AYR1	r_3249	0.00E+00	0.00E+00	0.00E+00
27	e_1003	AYR1	r_3250	0.00E+00	0.00E+00	0.00E+00
28	e_1003	AYR1	r_3251	0.00E+00	0.00E+00	0.00E+00
29	e_1003	AYR1	r_3252	2.74E-05	9.77E-05	0.00E+00
30	e_1003	AYR1	r_3253	2.74E-05	9.77E-05	0.00E+00
31	e_1004	ALE1	r_3254	2.74E-05	9.77E-05	0.00E+00
32	e_1004	ALE1	r_3255	2.74E-05	9.77E-05	0.00E+00
33	e_1005	SLC1	r_3256	2.74E-05	9.77E-05	0.00E+00
34	e_1004	ALE1	r_3257	2.74E-05	9.77E-05	0.00E+00
35	e_1004	ALE1	r_3258	2.74E-05	9.77E-05	0.00E+00
36	e_1005	SLC1	r_3259	2.74E-05	9.77E-05	0.00E+00
37	e_1004	ALE1	r_3260	2.74E-05	9.77E-05	0.00E+00
38	e_1004	ALE1	r_3261	2.74E-05	9.77E-05	0.00E+00
39	e_1005	SLC1	r_3262	2.74E-05	9.77E-05	0.00E+00
40	e_1004	ALE1	r_3263	2.74E-05	9.77E-05	0.00E+00
41	e_1004	ALE1	r_3264	2.74E-05	9.77E-05	0.00E+00
42	e_1005	SLC1	r_3265	2.74E-05	9.77E-05	0.00E+00
43	e_0133	SLC1	r_3266	2.74E-05	9.77E-05	0.00E+00
44	e_0611	TGL4	r_3267	2.74E-05	9.77E-05	0.00E+00
45	e_0851	TGL5	r_3268	2.74E-05	9.77E-05	0.00E+00
46	e_0133	SLC1	r_3269	2.74E-05	9.77E-05	0.00E+00
47	e_0611	TGL4	r_3270	2.74E-05	9.77E-05	0.00E+00
48	e_0851	TGL5	r_3271	2.74E-05	9.77E-05	0.00E+00
49	e_0133	SLC1	r_3272	2.74E-05	9.77E-05	0.00E+00
50	e_0611	TGL4	r_3273	2.74E-05	9.77E-05	0.00E+00
51	e_0851	TGL5	r_3274	2.74E-05	9.77E-05	0.00E+00
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2	e_0133	SLC1	r_3275	2.74E-05	9.77E-05	0.00E+00
3	e_0611	TGL4	r_3276	2.74E-05	9.77E-05	0.00E+00
4	e_0851	TGL5	r_3277	2.74E-05	9.77E-05	0.00E+00
5	e_1006	PAH1	r_3278	2.74E-05	9.77E-05	0.00E+00
6	e_1006	PAH1	r_3279	2.74E-05	9.77E-05	0.00E+00
7	e_1006	PAH1	r_3280	2.74E-05	9.77E-05	0.00E+00
8	e_1006	PAH1	r_3281	2.74E-05	9.77E-05	0.00E+00
9	e_1006	PAH1	r_3282	2.74E-05	9.77E-05	0.00E+00
10	e_1006	PAH1	r_3283	2.74E-05	9.77E-05	0.00E+00
11	e_1006	PAH1	r_3284	2.74E-05	9.77E-05	0.00E+00
12	e_1006	PAH1	r_3285	2.74E-05	9.77E-05	0.00E+00
13	e_1006	PAH1	r_3286	2.74E-05	9.77E-05	0.00E+00
14	e_1007	DPP1	r_3287	2.74E-05	9.77E-05	0.00E+00
15	e_1007	DPP1	r_3288	2.74E-05	9.77E-05	0.00E+00
16	e_1007	DPP1	r_3289	2.74E-05	9.77E-05	0.00E+00
17	e_1007	DPP1	r_3290	2.74E-05	9.77E-05	0.00E+00
18	e_1007	DPP1	r_3291	2.74E-05	9.77E-05	0.00E+00
19	e_1007	DPP1	r_3292	2.74E-05	9.77E-05	0.00E+00
20	e_1007	DPP1	r_3293	2.74E-05	9.77E-05	0.00E+00
21	e_1007	DPP1	r_3294	2.74E-05	9.77E-05	0.00E+00
22	e_1008	LPP1	r_3295	2.74E-05	9.77E-05	0.00E+00
23	e_1008	LPP1	r_3296	1.19E-05	4.22E-05	0.00E+00
24	e_1008	LPP1	r_3297	1.19E-05	4.22E-05	0.00E+00
25	e_1008	LPP1	r_3298	1.19E-05	4.22E-05	0.00E+00
26	e_1008	LPP1	r_3299	1.19E-05	4.22E-05	0.00E+00
27	e_1008	LPP1	r_3300	1.19E-05	4.22E-05	0.00E+00
28	e_1008	LPP1	r_3301	1.19E-05	4.22E-05	0.00E+00
29	e_1008	LPP1	r_3302	1.19E-05	4.22E-05	0.00E+00
30	e_1009	ARE2	r_3303	1.19E-05	4.22E-05	0.00E+00
31	e_1010	ARE1	r_3304	0.00E+00	0.00E+00	0.00E+00
32	e_1011	DGA1	r_3305	0.00E+00	0.00E+00	0.00E+00
33	e_1009	ARE2	r_3306	0.00E+00	0.00E+00	0.00E+00
34	e_1010	ARE1	r_3307	0.00E+00	0.00E+00	0.00E+00
35	e_1011	DGA1	r_3308	1.19E-05	4.22E-05	0.00E+00
36	e_1009	ARE2	r_3309	1.19E-05	4.22E-05	0.00E+00
37	e_1010	ARE1	r_3310	1.19E-05	4.22E-05	0.00E+00
38	e_1011	DGA1	r_3311	1.19E-05	4.22E-05	0.00E+00
39	e_1009	ARE2	r_3312	2.74E-05	9.77E-05	0.00E+00
40	e_1010	ARE1	r_3313	2.74E-05	9.77E-05	0.00E+00
41	e_1011	DGA1	r_3314	2.74E-05	9.77E-05	0.00E+00
42	e_1009	ARE2	r_3315	2.74E-05	9.77E-05	0.00E+00
43	e_1010	ARE1	r_3316	2.74E-05	9.77E-05	0.00E+00
44	e_1011	DGA1	r_3317	2.74E-05	9.77E-05	0.00E+00
45	e_1009	ARE2	r_3318	2.74E-05	9.77E-05	0.00E+00
46	e_1010	ARE1	r_3319	2.74E-05	9.77E-05	0.00E+00
47	e_1011	DGA1	r_3320	2.74E-05	9.77E-05	0.00E+00
48	e_1009	ARE2	r_3321	2.74E-05	9.77E-05	0.00E+00
49	e_1010	ARE1	r_3322	2.74E-05	9.77E-05	0.00E+00
50	e_1011	DGA1	r_3323	2.74E-05	9.77E-05	0.00E+00
51	e_1009	ARE2	r_3324	2.74E-05	9.77E-05	0.00E+00
52	e_1010	ARE1				
53	e_1011	DGA1				
54	e_1009	ARE2				
55	e_1010	ARE1				
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2	e_1011	DGA1	r_3325	2.74E-05	9.77E-05	0.00E+00
3	e_1009	ARE2	r_3326	2.74E-05	9.77E-05	0.00E+00
4	e_1010	ARE1	r_3327	2.74E-05	9.77E-05	0.00E+00
5	e_1011	DGA1	r_3328	2.74E-05	9.77E-05	0.00E+00
6	e_1009	ARE2	r_3329	2.74E-05	9.77E-05	0.00E+00
7	e_1010	ARE1	r_3330	2.74E-05	9.77E-05	0.00E+00
8	e_1011	DGA1	r_3331	2.74E-05	9.77E-05	0.00E+00
9	e_1009	ARE2	r_4039	8.53E-05	3.03E-04	0.00E+00
10	e_1010	ARE1	r_4042	0.00E+00	0.00E+00	0.00E+00
11	e_1011	DGA1	r_4045	4.80E-05	1.71E-04	0.00E+00
12	e_1009	ARE2	r_0964	4.80E-05	1.71E-04	0.00E+00
13	e_1010	ARE1	r_1028	0.00E+00	0.00E+00	0.00E+00
14	e_1011	DGA1	r_1085	4.80E-05	1.71E-04	0.00E+00
15	e_1009	ARE2	r_1086	4.80E-05	1.71E-04	0.00E+00
16	e_1010	ARE1	r_1096	1.76E-06	6.27E-06	0.00E+00
17	e_1011	DGA1	r_1097	2.41E-06	8.59E-06	0.00E+00
18	e_1009	ARE2	r_1098	1.23E-06	4.38E-06	0.00E+00
19	e_1010	ARE1	r_1099	1.56E-06	5.57E-06	1.94E-03
20	e_1011	DGA1	r_1100	0.00E+00	0.00E+00	0.00E+00
21	e_1009	ARE2	r_1101	0.00E+00	0.00E+00	0.00E+00
22	e_1010	ARE1	r_1103	0.00E+00	0.00E+00	0.00E+00
23	e_1011	DGA1	r_1104	0.00E+00	0.00E+00	0.00E+00
24	e_1009	ARE2	r_1106	6.62E-06	2.36E-05	0.00E+00
25	e_1010	ARE1	r_1107	2.44E-06	8.67E-06	0.00E+00
26	e_1011	DGA1	r_1108	0.00E+00	0.00E+00	0.00E+00
27	e_1009	ARE2	r_1109	0.00E+00	0.00E+00	0.00E+00
28	e_1010	ARE1	r_1110	2.49E-04	7.72E-04	7.28E-02
29	e_1011	DGA1	r_1111	0.00E+00	0.00E+00	0.00E+00
30	e_1009	ARE2	r_1112	2.00E+03	2.00E+03	6.02E-03
31	e_1010	ARE1	r_1113	0.00E+00	0.00E+00	0.00E+00
32	e_1011	DGA1	r_1114	0.00E+00	0.00E+00	0.00E+00
33	e_1009	ARE2	r_1115	2.25E-05	8.02E-05	6.80E-02
34	e_1010	ARE1	r_1116	2.74E-05	9.77E-05	0.00E+00
35	e_1011	DGA1	r_1118	1.00E+03	1.00E+03	0.00E+00
36	e_1009	ARE2	r_1119	0.00E+00	0.00E+00	0.00E+00
37	e_1010	ARE1	r_1120	3.69E-05	1.31E-04	0.00E+00
38	e_1011	DGA1	r_1121	6.12E-05	1.34E-04	3.59E-05
39	e_1009	ARE2	r_1122	6.12E-05	1.34E-04	0.00E+00
40	e_1010	ARE1	r_1123	6.12E-05	1.34E-04	0.00E+00
41	e_1011	DGA1	r_1124	6.12E-05	1.34E-04	3.33E-05
42	e_1009	ARE2	r_1125	0.00E+00	0.00E+00	0.00E+00
43	e_1010	ARE1	r_1126	2.00E+03	2.00E+03	6.90E-03
44	e_1011	DGA1	r_1127	1.94E-04	6.89E-04	1.33E-02
45	e_1009	ARE2	r_1128	2.00E+03	2.00E+03	0.00E+00
46	e_1010	ARE1	r_1129	3.65E-05	1.09E-04	2.79E-04
47	e_1011	DGA1	r_1130	5.36E-05	1.17E-04	0.00E+00
48	e_1009	ARE2	r_1131	4.76E-05	1.04E-04	0.00E+00
49	e_1010	ARE1	r_1132	0.00E+00	0.00E+00	0.00E+00
50	e_1011	DGA1	r_1133	0.00E+00	0.00E+00	0.00E+00
51	e_1009	ARE2	r_1134	0.00E+00	0.00E+00	0.00E+00
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2	e_1010	ARE1	r_1135	0.00E+00	0.00E+00	0.00E+00
3	e_1011	DGA1	r_1136	3.78E-06	1.35E-05	0.00E+00
4	e_1009	ARE2	r_1137	2.68E-01	2.89E-01	0.00E+00
5	e_1010	ARE1	r_1138	2.68E-01	2.89E-01	0.00E+00
6	e_1011	DGA1	r_1139	0.00E+00	0.00E+00	0.00E+00
7	e_1009	ARE2	r_1146	2.32E-07	8.26E-07	0.00E+00
8	e_1010	ARE1	r_1147	2.30E-07	8.18E-07	0.00E+00
9	e_1011	DGA1	r_1148	2.00E+03	2.00E+03	0.00E+00
10	e_1009	ARE2	r_1149	0.00E+00	0.00E+00	0.00E+00
11	e_1010	ARE1	r_1151	0.00E+00	0.00E+00	0.00E+00
12	e_1011	DGA1	r_1161	2.32E-07	8.26E-07	0.00E+00
13	e_1009	ARE2	r_1162	0.00E+00	0.00E+00	0.00E+00
14	e_1010	ARE1	r_1164	0.00E+00	0.00E+00	0.00E+00
15	e_1011	DGA1	r_1165	0.00E+00	0.00E+00	0.00E+00
16	e_1009	ARE2	r_1166	2.05E-06	7.30E-06	0.00E+00
17	e_1010	ARE1	r_1167	0.00E+00	0.00E+00	0.00E+00
18	e_1011	DGA1	r_1168	4.80E-05	1.71E-04	0.00E+00
19	e_1009	ARE2	r_1169	1.14E-06	4.06E-06	0.00E+00
20	e_1010	ARE1	r_1170	8.68E-07	3.09E-06	0.00E+00
21	e_1011	DGA1	r_1171	1.00E+03	1.00E+03	0.00E+00
22	e_1009	ARE2	r_1172	1.00E+03	1.00E+03	0.00E+00
23	e_1010	ARE1	r_1173	7.75E-06	2.76E-05	0.00E+00
24	e_1011	DGA1	r_1174	2.74E-05	9.77E-05	0.00E+00
25	e_0883	DGA1	r_1175	3.87E-05	1.37E-04	0.00E+00
26	e_0883	DGA1	r_1176	2.22E-06	7.89E-06	0.00E+00
27	e_0883	DGA1	r_1177	0.00E+00	0.00E+00	0.00E+00
28	e_0883	DGA1	r_1179	8.80E-08	0.00E+00	9.48E-08
29	e_0883	DGA1	r_1180	1.30E-06	4.61E-06	0.00E+00
30	e_0883	DGA1	r_1181	1.56E-06	5.54E-06	0.00E+00
31	e_0883	DGA1	r_1182	0.00E+00	0.00E+00	0.00E+00
32	e_0883	DGA1	r_1183	4.31E-06	1.53E-05	0.00E+00
33	e_0883	DGA1	r_1184	1.72E-06	6.10E-06	0.00E+00
34	e_0883	DGA1	r_1185	0.00E+00	0.00E+00	0.00E+00
35	e_0883	DGA1	r_1186	1.75E-05	6.21E-05	0.00E+00
36	e_0883	DGA1	r_1187	1.00E+03	1.00E+03	0.00E+00
37	e_0883	DGA1	r_1188	1.00E+03	1.00E+03	0.00E+00
38	e_0883	DGA1	r_1189	0.00E+00	0.00E+00	0.00E+00
39	e_0883	DGA1	r_1190	2.14E-05	7.62E-05	0.00E+00
40	e_0883	DGA1	r_1191	0.00E+00	0.00E+00	0.00E+00
41	e_0883	DGA1	r_1192	1.36E-07	8.06E-06	0.00E+00
42	e_0883	DGA1	r_1193	0.00E+00	0.00E+00	0.00E+00
43	e_0883	DGA1	r_1194	3.52E-04	1.25E-03	1.11E-02
44	e_0883	DGA1	r_1195	0.00E+00	0.00E+00	0.00E+00
45	e_0883	DGA1	r_1196	2.65E-06	9.42E-06	0.00E+00
46	e_0883	DGA1	r_1197	1.00E+03	1.00E+03	0.00E+00
47	e_0883	DGA1	r_1198	1.00E+03	1.00E+03	0.00E+00
48	e_0883	DGA1	r_1199	2.51E-06	8.92E-06	0.00E+00
49	e_0883	DGA1	r_1200	0.00E+00	0.00E+00	0.00E+00
50	e_0883	DGA1	r_1201	1.72E-06	6.13E-06	0.00E+00
51	e_0883	DGA1	r_1202	2.00E+03	2.00E+03	0.00E+00
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2	e_0883	DGA1	r_1203	1.00E+03	1.00E+03	0.00E+00
3	e_0883	DGA1	r_1204	1.00E+03	1.00E+03	0.00E+00
4	e_0883	DGA1	r_1205	1.58E-06	5.61E-06	0.00E+00
5	e_0883	DGA1	r_1206	0.00E+00	0.00E+00	0.00E+00
6	e_0883	DGA1	r_1207	0.00E+00	0.00E+00	0.00E+00
7	e_1012	CDS1	r_1208	2.00E+03	2.00E+03	0.00E+00
8	e_1012	CDS1	r_1209	1.00E+03	1.00E+03	0.00E+00
9	e_1012	CDS1	r_1210	1.00E+03	1.00E+03	0.00E+00
10	e_1012	CDS1	r_1211	1.69E-06	6.00E-06	0.00E+00
11	e_1012	CDS1	r_1212	0.00E+00	0.00E+00	0.00E+00
12	e_1012	CDS1	r_1213	1.56E-06	5.57E-06	0.00E+00
13	e_1012	CDS1	r_1214	1.31E-07	4.95E-06	0.00E+00
14	e_1012	CDS1	r_1215	1.15E-06	4.10E-06	0.00E+00
15	e_1013	CDS1	r_1216	2.11E-06	7.50E-06	0.00E+00
16	e_1013	CDS1	r_1217	4.51E-06	1.60E-05	0.00E+00
17	e_1013	CDS1	r_1218	2.73E-06	9.71E-06	0.00E+00
18	e_1013	CDS1	r_1219	9.29E-07	3.31E-06	0.00E+00
19	e_1013	CDS1	r_1220	2.00E+03	2.00E+03	0.00E+00
20	e_1013	CDS1	r_1221	1.00E+03	1.00E+03	0.00E+00
21	e_1013	CDS1	r_1222	1.00E+03	1.00E+03	0.00E+00
22	e_1014	CHO1	r_1223	1.21E-06	4.30E-06	0.00E+00
23	e_1014	CHO1	r_1224	2.15E-06	7.66E-06	0.00E+00
24	e_1014	CHO1	r_1225	2.68E-07	9.53E-07	0.00E+00
25	e_1014	CHO1	r_1226	1.92E-04	6.84E-04	0.00E+00
26	e_1014	CHO1	r_1227	0.00E+00	0.00E+00	0.00E+00
27	e_1014	CHO1	r_1228	5.56E-07	1.98E-06	0.00E+00
28	e_1014	CHO1	r_1229	0.00E+00	0.00E+00	0.00E+00
29	e_1015	PIS1	r_1230	0.00E+00	0.00E+00	0.00E+00
30	e_1015	PIS1	r_1231	0.00E+00	0.00E+00	0.00E+00
31	e_1015	PIS1	r_1232	0.00E+00	0.00E+00	0.00E+00
32	e_1015	PIS1	r_1233	0.00E+00	0.00E+00	0.00E+00
33	e_1015	PIS1	r_1234	0.00E+00	0.00E+00	0.00E+00
34	e_1015	PIS1	r_1235	0.00E+00	0.00E+00	0.00E+00
35	e_1015	PIS1	r_1236	2.83E-05	1.01E-04	0.00E+00
36	e_1015	PIS1	r_1237	2.21E-04	7.87E-04	2.21E-03
37	e_1015	PIS1	r_1238	2.11E-06	7.50E-06	0.00E+00
38	e_1015	PIS1	r_1239	1.92E-04	6.84E-04	0.00E+00
39	e_1016	CST26	r_1240	0.00E+00	0.00E+00	0.00E+00
40	e_1016	CST26	r_1241	9.33E-07	3.32E-06	0.00E+00
41	e_1016	CST26	r_1242	0.00E+00	0.00E+00	0.00E+00
42	e_1017	PSD1	r_1243	9.57E-07	3.40E-06	0.00E+00
43	e_1017	PSD1	r_1244	7.05E-06	2.51E-05	4.00E-02
44	e_1017	PSD1	r_1245	4.71E-04	1.62E-03	1.21E-01
45	e_1017	PSD1	r_1246	0.00E+00	0.00E+00	0.00E+00
46	e_1017	PSD1	r_1247	0.00E+00	0.00E+00	0.00E+00
47	e_1017	PSD1	r_1248	0.00E+00	0.00E+00	0.00E+00
48	e_1017	PSD1	r_1249	0.00E+00	0.00E+00	0.00E+00
49	e_1017	PSD1	r_1250	1.00E+03	1.00E+03	0.00E+00
50	e_1017	PSD1	r_1251	1.00E+03	1.00E+03	0.00E+00
51	e_1017	PSD1	r_1252	0.00E+00	0.00E+00	0.00E+00
52	e_1017	PSD1	r_1253	0.00E+00	0.00E+00	0.00E+00
53	e_1018	PSD2	r_1254	5.22E-06	1.86E-05	0.00E+00
54	e_1018	PSD2	r_1255	0.00E+00	0.00E+00	0.00E+00
55	e_1018	PSD2	r_1256	0.00E+00	0.00E+00	0.00E+00
56	e_1018	PSD2	r_1257	0.00E+00	0.00E+00	0.00E+00
57	e_1018	PSD2	r_1258	0.00E+00	0.00E+00	0.00E+00

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2	e_1018	PSD2	r_1259	1.00E+03	1.00E+03	0.00E+00
3	e_1018	PSD2	r_1260	1.00E+03	1.00E+03	0.00E+00
4	e_1018	PSD2	r_1261	0.00E+00	0.00E+00	0.00E+00
5	e_1019	PSD2	r_1262	6.70E-07	2.38E-06	0.00E+00
6	e_1019	PSD2	r_1263	0.00E+00	0.00E+00	0.00E+00
7	e_1019	PSD2	r_1264	1.92E-04	6.84E-04	0.00E+00
8	e_1019	PSD2	r_1265	3.81E+00	3.86E+00	8.88E-01
9	e_1019	PSD2	r_1266	1.22E-05	4.33E-05	5.24E-04
10	e_1019	PSD2	r_1267	1.22E-05	4.33E-05	0.00E+00
11	e_1019	PSD2	r_1268	0.00E+00	0.00E+00	0.00E+00
12	e_1019	PSD2	r_1269	0.00E+00	0.00E+00	0.00E+00
13	e_1019	PSD2	r_1269	0.00E+00	0.00E+00	0.00E+00
14	e_1020	CHO2	r_1270	0.00E+00	0.00E+00	0.00E+00
15	e_1021	OPI3	r_1271	0.00E+00	0.00E+00	0.00E+00
16	e_1020	CHO2	r_1272	0.00E+00	0.00E+00	0.00E+00
17	e_1021	OPI3	r_1273	9.24E-06	3.29E-05	0.00E+00
18	e_1020	CHO2	r_1274	0.00E+00	0.00E+00	0.00E+00
19	e_1021	OPI3	r_1275	0.00E+00	0.00E+00	0.00E+00
20	e_1020	CHO2	r_1276	0.00E+00	0.00E+00	0.00E+00
21	e_1021	OPI3	r_1277	1.12E-04	3.99E-04	1.92E-01
22	e_1020	CHO2	r_1278	2.43E-07	8.64E-07	0.00E+00
23	e_1021	OPI3	r_1279	2.00E+03	2.00E+03	2.01E-03
24	e_1020	CHO2	r_1280	2.00E+03	2.00E+03	0.00E+00
25	e_1021	OPI3	r_1281	2.00E+03	2.00E+03	1.93E-02
26	e_1020	CHO2	r_1657	0.00E+00	0.00E+00	0.00E+00
27	e_1021	OPI3	r_2034	2.68E-01	2.89E-01	2.06E-02
28	e_1020	CHO2	r_2079	9.69E-07	3.45E-06	0.00E+00
29	e_1021	OPI3	r_2132	1.00E+03	1.00E+03	0.00E+00
30	e_1021	OPI3	r_2219	1.75E-05	6.21E-05	0.00E+00
31	e_1021	OPI3	r_2220	1.75E-05	6.21E-05	0.00E+00
32	e_1021	OPI3	r_2221	1.75E-05	6.21E-05	0.00E+00
33	e_1021	OPI3	r_2222	1.75E-05	6.21E-05	0.00E+00
34	e_1021	OPI3	r_2223	1.75E-05	6.21E-05	0.00E+00
35	e_1021	OPI3	r_2224	1.75E-05	6.21E-05	0.00E+00
36	e_1021	OPI3	r_2225	6.67E-06	2.37E-05	0.00E+00
37	e_1021	OPI3	r_2226	4.12E-06	1.47E-05	0.00E+00
38	e_1021	OPI3	r_2227	2.98E-06	1.06E-05	0.00E+00
39	e_1021	OPI3	r_2228	2.34E-06	8.32E-06	0.00E+00
40	e_1021	OPI3	r_3348	3.79E-05	4.08E-05	2.92E-06
41	e_1021	OPI3	r_3349	3.79E-05	4.08E-05	0.00E+00
42	e_1021	OPI3	r_3350	3.79E-05	4.08E-05	0.00E+00
43	e_1021	OPI3	r_3351	3.79E-05	4.08E-05	0.00E+00
44	e_1021	OPI3	r_3352	3.79E-05	4.08E-05	0.00E+00
45	e_1021	OPI3	r_3353	3.79E-05	4.08E-05	0.00E+00
46	e_1022	DGK1	r_3354	3.79E-05	4.08E-05	0.00E+00
47	e_1022	DGK1	r_3355	3.79E-05	4.08E-05	0.00E+00
48	e_1022	DGK1	r_3356	2.25E-05	3.95E-05	0.00E+00
49	e_1022	DGK1	r_3357	2.02E-05	3.95E-05	0.00E+00
50	e_1022	DGK1	r_3358	2.02E-05	3.95E-05	0.00E+00
51	e_1022	DGK1	r_3359	2.02E-05	3.95E-05	0.00E+00
52	e_1022	DGK1	r_3360	2.02E-05	3.95E-05	0.00E+00
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2	e_1022	DGK1	r_3361	2.02E-05	3.95E-05	0.00E+00
3	e_1023	EPT1	r_3362	2.02E-05	3.95E-05	0.00E+00
4	e_1023	EPT1	r_3363	2.02E-05	3.95E-05	0.00E+00
5	e_1023	EPT1	r_3364	2.46E-05	4.08E-05	0.00E+00
6	e_1023	EPT1	r_3365	2.18E-05	4.08E-05	0.00E+00
7	e_1023	EPT1	r_3366	2.18E-05	4.08E-05	0.00E+00
8	e_1023	EPT1	r_3367	2.18E-05	4.08E-05	0.00E+00
9	e_1023	EPT1	r_3368	2.18E-05	4.08E-05	0.00E+00
10	e_1023	EPT1	r_3369	2.18E-05	4.08E-05	0.00E+00
11	e_1023	EPT1	r_3370	2.18E-05	4.08E-05	0.00E+00
12	e_1024	CPT1	r_3371	2.18E-05	4.08E-05	0.00E+00
13	e_1023	EPT1	r_3372	1.18E-05	3.95E-05	0.00E+00
14	e_1024	CPT1	r_3373	1.11E-05	3.94E-05	0.00E+00
15	e_1023	EPT1	r_3374	1.11E-05	3.94E-05	0.00E+00
16	e_1024	CPT1	r_3375	1.11E-05	3.94E-05	0.00E+00
17	e_1023	EPT1	r_3376	1.11E-05	3.94E-05	0.00E+00
18	e_1024	CPT1	r_3377	1.11E-05	3.94E-05	0.00E+00
19	e_1023	EPT1	r_3378	1.11E-05	3.94E-05	0.00E+00
20	e_1024	CPT1	r_3379	1.11E-05	3.94E-05	0.00E+00
21	e_1023	EPT1	r_3380	2.46E-05	4.08E-05	0.00E+00
22	e_1024	CPT1	r_3381	2.18E-05	4.08E-05	0.00E+00
23	e_1023	EPT1	r_3382	2.18E-05	4.08E-05	0.00E+00
24	e_1024	CPT1	r_3383	2.18E-05	4.08E-05	0.00E+00
25	e_1023	EPT1	r_3384	2.18E-05	4.08E-05	0.00E+00
26	e_1024	CPT1	r_3385	2.18E-05	4.08E-05	0.00E+00
27	e_1025	PGS1	r_3386	2.18E-05	4.08E-05	0.00E+00
28	e_1025	PGS1	r_3387	2.18E-05	4.08E-05	0.00E+00
29	e_1025	PGS1	r_3388	1.18E-05	3.95E-05	0.00E+00
30	e_1025	PGS1	r_3389	1.11E-05	3.94E-05	0.00E+00
31	e_1025	PGS1	r_3390	1.11E-05	3.94E-05	0.00E+00
32	e_1025	PGS1	r_3391	1.11E-05	3.94E-05	0.00E+00
33	e_1026	GEP4	r_3392	1.11E-05	3.94E-05	0.00E+00
34	e_1026	GEP4	r_3393	1.11E-05	3.94E-05	0.00E+00
35	e_1026	GEP4	r_3394	1.11E-05	3.94E-05	0.00E+00
36	e_1026	GEP4	r_3395	1.11E-05	3.94E-05	0.00E+00
37	e_1026	GEP4	r_3396	1.23E-05	4.08E-05	0.00E+00
38	e_1026	GEP4	r_3397	1.16E-05	4.05E-05	0.00E+00
39	e_1027	CRD1	r_3398	1.16E-05	4.07E-05	0.00E+00
40	e_1027	CRD1	r_3399	1.16E-05	4.05E-05	0.00E+00
41	e_1027	CRD1	r_3400	1.16E-05	4.07E-05	0.00E+00
42	e_1027	CRD1	r_3401	1.16E-05	4.05E-05	0.00E+00
43	e_1027	CRD1	r_3402	1.16E-05	4.05E-05	0.00E+00
44	e_1027	CRD1	r_3403	1.16E-05	4.05E-05	0.00E+00
45	e_1027	CRD1	r_3404	7.96E-06	2.83E-05	0.00E+00
46	e_1027	CRD1	r_3405	7.64E-06	2.72E-05	0.00E+00
47	e_1027	CRD1	r_3406	7.64E-06	2.72E-05	0.00E+00
48	e_1027	CRD1	r_3407	7.64E-06	2.72E-05	0.00E+00
49	e_1027	CRD1	r_3408	7.64E-06	2.72E-05	0.00E+00
50	e_1027	CRD1	r_3409	7.64E-06	2.72E-05	0.00E+00
51	e_1027	CRD1	r_3410	7.64E-06	2.72E-05	0.00E+00
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2	e_1027	CRD1	r_3411	7.64E-06	2.72E-05	0.00E+00
3	e_1027	CRD1	r_3412	8.21E-06	2.92E-05	0.00E+00
4	e_1027	CRD1	r_3413	7.87E-06	2.80E-05	0.00E+00
5	e_1027	CRD1	r_3414	7.87E-06	2.80E-05	0.00E+00
6	e_1027	CRD1	r_3415	7.87E-06	2.80E-05	0.00E+00
7	e_1027	CRD1	r_3416	7.87E-06	2.80E-05	0.00E+00
8	e_1027	CRD1	r_3417	7.87E-06	2.80E-05	0.00E+00
9	e_1027	CRD1	r_3418	7.87E-06	2.80E-05	0.00E+00
10	e_1027	CRD1	r_3419	7.87E-06	2.80E-05	0.00E+00
11	e_1027	CRD1	r_3420	6.02E-06	2.14E-05	0.00E+00
12	e_1027	CRD1	r_3421	5.83E-06	2.08E-05	0.00E+00
13	e_1027	CRD1	r_3422	5.83E-06	2.08E-05	0.00E+00
14	e_1027	CRD1	r_3423	5.83E-06	2.08E-05	0.00E+00
15	e_1027	CRD1	r_3424	5.83E-06	2.08E-05	0.00E+00
16	e_1027	CRD1	r_3425	5.83E-06	2.08E-05	0.00E+00
17	e_1027	CRD1	r_3426	5.83E-06	2.08E-05	0.00E+00
18	e_1027	CRD1	r_3427	5.83E-06	2.08E-05	0.00E+00
19	e_1027	CRD1	r_3428	9.91E-05	1.75E-04	2.92E-06
20	e_1027	CRD1	r_3429	5.84E-05	1.31E-04	0.00E+00
21	e_1027	CRD1	r_3430	6.60E-05	1.40E-04	0.00E+00
22	e_1027	CRD1	r_3431	5.84E-05	1.31E-04	0.00E+00
23	e_1027	CRD1	r_3432	6.60E-05	1.40E-04	0.00E+00
24	e_1027	CRD1	r_3433	5.84E-05	1.31E-04	0.00E+00
25	e_1027	CRD1	r_3434	5.84E-05	1.31E-04	0.00E+00
26	e_1027	CRD1	r_3435	5.84E-05	1.31E-04	0.00E+00
27	e_1028	CLD1	r_3436	6.12E-05	1.34E-04	0.00E+00
28	e_1028	CLD1	r_3437	4.22E-05	1.14E-04	0.00E+00
29	e_1028	CLD1	r_3438	4.62E-05	1.18E-04	0.00E+00
30	e_1028	CLD1	r_3439	4.22E-05	1.14E-04	0.00E+00
31	e_1028	CLD1	r_3440	4.62E-05	1.18E-04	0.00E+00
32	e_1028	CLD1	r_3441	4.22E-05	1.14E-04	0.00E+00
33	e_1028	CLD1	r_3442	4.22E-05	1.14E-04	0.00E+00
34	e_1028	CLD1	r_3443	4.22E-05	1.14E-04	0.00E+00
35	e_1028	CLD1	r_3444	6.12E-05	1.34E-04	3.59E-05
36	e_1028	CLD1	r_3445	4.22E-05	1.14E-04	0.00E+00
37	e_1028	CLD1	r_3446	4.62E-05	1.18E-04	0.00E+00
38	e_1028	CLD1	r_3447	4.22E-05	1.14E-04	0.00E+00
39	e_1028	CLD1	r_3448	4.62E-05	1.18E-04	0.00E+00
40	e_1028	CLD1	r_3449	4.22E-05	1.14E-04	0.00E+00
41	e_1028	CLD1	r_3450	4.22E-05	1.14E-04	0.00E+00
42	e_1028	CLD1	r_3451	4.22E-05	1.14E-04	0.00E+00
43	e_1028	CLD1	r_3452	6.12E-05	1.34E-04	0.00E+00
44	e_1028	CLD1	r_3453	4.22E-05	1.14E-04	0.00E+00
45	e_1028	CLD1	r_3454	4.62E-05	1.18E-04	0.00E+00
46	e_1028	CLD1	r_3455	4.22E-05	1.14E-04	0.00E+00
47	e_1028	CLD1	r_3456	4.62E-05	1.18E-04	0.00E+00
48	e_1028	CLD1	r_3457	4.22E-05	1.14E-04	0.00E+00
49	e_1028	CLD1	r_3458	4.22E-05	1.14E-04	0.00E+00
50	e_1028	CLD1	r_3459	4.22E-05	1.14E-04	0.00E+00
51	e_1028	CLD1	r_3460	6.12E-05	1.34E-04	0.00E+00
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2	e_1028	CLD1	r_3461	4.22E-05	1.14E-04	0.00E+00
3	e_1028	CLD1	r_3462	4.62E-05	1.18E-04	0.00E+00
4	e_1028	CLD1	r_3463	4.22E-05	1.14E-04	0.00E+00
5	e_1028	CLD1	r_3464	4.62E-05	1.18E-04	0.00E+00
6	e_1028	CLD1	r_3465	4.22E-05	1.14E-04	0.00E+00
7	e_1028	CLD1	r_3466	4.22E-05	1.14E-04	0.00E+00
8	e_1028	CLD1	r_3467	4.22E-05	1.14E-04	0.00E+00
9	e_1028	CLD1	r_3468	6.12E-05	1.34E-04	0.00E+00
10	e_1028	CLD1	r_3469	4.22E-05	1.14E-04	0.00E+00
11	e_1029	TAZ1	r_3470	4.62E-05	1.18E-04	0.00E+00
12	e_1029	TAZ1	r_3471	4.22E-05	1.14E-04	0.00E+00
13	e_1029	TAZ1	r_3472	4.62E-05	1.18E-04	0.00E+00
14	e_1029	TAZ1	r_3473	4.22E-05	1.14E-04	0.00E+00
15	e_1029	TAZ1	r_3474	4.22E-05	1.14E-04	0.00E+00
16	e_1029	TAZ1	r_3475	4.22E-05	1.14E-04	0.00E+00
17	e_1029	TAZ1	r_3476	6.12E-05	1.34E-04	0.00E+00
18	e_1029	TAZ1	r_3477	4.22E-05	1.14E-04	0.00E+00
19	e_1029	TAZ1	r_3478	4.62E-05	1.18E-04	0.00E+00
20	e_1029	TAZ1	r_3479	4.22E-05	1.14E-04	0.00E+00
21	e_1029	TAZ1	r_3480	4.62E-05	1.18E-04	0.00E+00
22	e_1029	TAZ1	r_3481	4.22E-05	1.14E-04	0.00E+00
23	e_1029	TAZ1	r_3482	4.22E-05	1.14E-04	0.00E+00
24	e_1029	TAZ1	r_3483	4.22E-05	1.14E-04	0.00E+00
25	e_1029	TAZ1	r_3484	6.12E-05	1.34E-04	3.33E-05
26	e_1029	TAZ1	r_3485	4.22E-05	1.14E-04	0.00E+00
27	e_1029	TAZ1	r_3486	4.62E-05	1.18E-04	0.00E+00
28	e_1029	TAZ1	r_3487	4.22E-05	1.14E-04	0.00E+00
29	e_1029	TAZ1	r_3488	4.62E-05	1.18E-04	0.00E+00
30	e_1029	TAZ1	r_3489	4.22E-05	1.14E-04	0.00E+00
31	e_1029	TAZ1	r_3490	4.22E-05	1.14E-04	0.00E+00
32	e_1029	TAZ1	r_3491	4.22E-05	1.14E-04	0.00E+00
33	e_1029	TAZ1	r_3492	6.12E-05	1.34E-04	0.00E+00
34	e_1029	TAZ1	r_3493	4.22E-05	1.14E-04	0.00E+00
35	e_1029	TAZ1	r_3494	4.62E-05	1.18E-04	0.00E+00
36	e_1029	TAZ1	r_3495	4.22E-05	1.14E-04	0.00E+00
37	e_1029	TAZ1	r_3496	4.62E-05	1.18E-04	0.00E+00
38	e_1029	TAZ1	r_3497	4.22E-05	1.14E-04	0.00E+00
39	e_1029	TAZ1	r_3498	4.22E-05	1.14E-04	0.00E+00
40	e_1029	TAZ1	r_3499	4.22E-05	1.14E-04	0.00E+00
41	e_1029	TAZ1	r_3500	6.12E-05	1.34E-04	0.00E+00
42	e_1029	TAZ1	r_3501	4.22E-05	1.14E-04	0.00E+00
43	e_1029	TAZ1	r_3502	4.62E-05	1.18E-04	0.00E+00
44	e_1029	TAZ1	r_3503	4.22E-05	1.14E-04	0.00E+00
45	e_1029	TAZ1	r_3504	4.62E-05	1.18E-04	0.00E+00
46	e_1029	TAZ1	r_3505	4.22E-05	1.14E-04	0.00E+00
47	e_1029	TAZ1	r_3506	4.22E-05	1.14E-04	0.00E+00
48	e_1029	TAZ1	r_3507	4.22E-05	1.14E-04	0.00E+00
49	e_1029	TAZ1	r_1357	2.19E-06	7.79E-06	0.00E+00
50	e_1029	TAZ1	r_1358	4.25E-06	1.51E-05	0.00E+00
51	e_1029	TAZ1	r_1359	3.84E-06	1.37E-05	2.83E-06
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2	e_1029	TAZ1	r_1360	0.00E+00	0.00E+00	0.00E+00
3	e_1029	TAZ1	r_1361	0.00E+00	0.00E+00	0.00E+00
4	e_1029	TAZ1	r_1362	0.00E+00	0.00E+00	0.00E+00
5	e_1029	TAZ1	r_1363	0.00E+00	0.00E+00	0.00E+00
6	e_1029	TAZ1	r_1364	0.00E+00	0.00E+00	0.00E+00
7	e_1029	TAZ1	r_1365	0.00E+00	0.00E+00	0.00E+00
8	e_1029	TAZ1	r_1366	0.00E+00	0.00E+00	0.00E+00
9	e_1029	TAZ1	r_1367	0.00E+00	0.00E+00	0.00E+00
10	e_1029	TAZ1	r_1368	0.00E+00	0.00E+00	0.00E+00
11	e_1029	TAZ1	r_1369	0.00E+00	0.00E+00	0.00E+00
12	e_1029	TAZ1	r_1370	0.00E+00	0.00E+00	0.00E+00
13	e_1029	TAZ1	r_1371	0.00E+00	0.00E+00	0.00E+00
14	e_1029	TAZ1	r_1449	2.09E-06	7.43E-06	0.00E+00
15	e_1029	TAZ1	r_1450	1.91E-06	6.80E-06	0.00E+00
16	e_1029	TAZ1	r_1451	1.92E-06	6.85E-06	0.00E+00
17	e_1029	TAZ1	r_1452	1.77E-06	6.31E-06	0.00E+00
18	e_1029	TAZ1	r_1453	2.28E-06	8.12E-06	0.00E+00
19	e_1029	TAZ1	r_1454	2.07E-06	7.37E-06	0.00E+00
20	e_1029	TAZ1	r_1455	2.09E-06	7.43E-06	0.00E+00
21	e_1029	TAZ1	r_1456	1.91E-06	6.80E-06	0.00E+00
22	e_1029	TAZ1	r_1457	1.79E-06	6.35E-06	0.00E+00
23	e_1029	TAZ1	r_1458	1.65E-06	5.89E-06	0.00E+00
24	e_1029	TAZ1	r_1459	0.00E+00	0.00E+00	0.00E+00
25	e_1029	TAZ1	r_1460	0.00E+00	0.00E+00	0.00E+00
26	e_1029	TAZ1	r_1461	0.00E+00	0.00E+00	0.00E+00
27	e_1029	TAZ1	r_1462	0.00E+00	0.00E+00	0.00E+00
28	e_1029	TAZ1	r_1463	0.00E+00	0.00E+00	0.00E+00
29	e_1029	TAZ1	r_1464	0.00E+00	0.00E+00	0.00E+00
30	e_1029	TAZ1	r_1465	0.00E+00	0.00E+00	0.00E+00
31	e_1029	TAZ1	r_1466	0.00E+00	0.00E+00	0.00E+00
32	e_1029	TAZ1	r_1467	0.00E+00	0.00E+00	0.00E+00
33	e_1029	TAZ1	r_1468	0.00E+00	0.00E+00	0.00E+00
34	e_1029	TAZ1	r_1469	0.00E+00	0.00E+00	0.00E+00
35	e_1029	TAZ1	r_1470	0.00E+00	0.00E+00	0.00E+00
36	e_1029	TAZ1	r_1471	0.00E+00	0.00E+00	0.00E+00
37	e_1029	TAZ1	r_1472	0.00E+00	0.00E+00	0.00E+00
38	e_1029	TAZ1	r_1473	0.00E+00	0.00E+00	0.00E+00
39	e_1029	TAZ1	r_1474	0.00E+00	0.00E+00	0.00E+00
40	e_1029	TAZ1	r_1475	0.00E+00	0.00E+00	0.00E+00
41	e_1029	TAZ1	r_1476	0.00E+00	0.00E+00	0.00E+00
42	e_1029	TAZ1	r_1477	0.00E+00	0.00E+00	0.00E+00
43	e_1029	TAZ1	r_1478	0.00E+00	0.00E+00	0.00E+00
44	e_1029	TAZ1	r_1479	2.46E-05	4.08E-05	2.92E-06
45	e_1029	TAZ1	r_1480	2.25E-05	3.95E-05	0.00E+00
46	e_1029	TAZ1	r_1481	2.46E-05	4.08E-05	0.00E+00
47	e_1029	TAZ1	r_1482	1.18E-05	3.95E-05	0.00E+00
48	e_1029	TAZ1	r_1483	2.46E-05	4.08E-05	0.00E+00
49	e_1029	TAZ1	r_1484	1.18E-05	3.95E-05	0.00E+00
50	e_1029	TAZ1	r_1485	1.23E-05	4.08E-05	0.00E+00
51	e_1029	TAZ1	r_1486	7.96E-06	2.83E-05	0.00E+00
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2	e_1029	TAZ1	r_1487	8.21E-06	2.92E-05	0.00E+00
3	e_1029	TAZ1	r_1488	6.02E-06	2.14E-05	0.00E+00
4	e_1029	TAZ1	r_1489	0.00E+00	0.00E+00	0.00E+00
5	e_1029	TAZ1	r_1490	0.00E+00	0.00E+00	0.00E+00
6	e_1029	TAZ1	r_1491	0.00E+00	0.00E+00	0.00E+00
7	e_1029	TAZ1	r_1492	0.00E+00	0.00E+00	0.00E+00
8	e_1029	TAZ1	r_1493	0.00E+00	0.00E+00	0.00E+00
9	e_1029	TAZ1	r_1494	0.00E+00	0.00E+00	0.00E+00
10	e_1029	TAZ1	r_1495	0.00E+00	0.00E+00	0.00E+00
11	e_1029	TAZ1	r_1496	0.00E+00	0.00E+00	0.00E+00
12	e_1029	TAZ1	r_1497	0.00E+00	0.00E+00	0.00E+00
13	e_1029	TAZ1	r_1498	0.00E+00	0.00E+00	0.00E+00
14	e_1029	TAZ1	r_1499	0.00E+00	0.00E+00	0.00E+00
15	e_1029	TAZ1	r_1500	0.00E+00	0.00E+00	0.00E+00
16	e_1029	TAZ1	r_1501	0.00E+00	0.00E+00	0.00E+00
17	e_1029	TAZ1	r_1502	0.00E+00	0.00E+00	0.00E+00
18	e_1029	TAZ1	r_1503	0.00E+00	0.00E+00	0.00E+00
19	e_1029	TAZ1	r_1504	0.00E+00	0.00E+00	0.00E+00
20	e_1029	TAZ1	r_1505	0.00E+00	0.00E+00	0.00E+00
21	e_1029	TAZ1	r_1506	0.00E+00	0.00E+00	0.00E+00
22	e_1029	TAZ1	r_1507	0.00E+00	0.00E+00	0.00E+00
23	e_1029	TAZ1	r_1508	0.00E+00	0.00E+00	0.00E+00
24	e_1029	TAZ1	r_1509	3.74E-06	1.33E-05	0.00E+00
25	e_1029	TAZ1	r_1510	3.21E-06	1.14E-05	0.00E+00
26	e_1029	TAZ1	r_1511	3.24E-06	1.15E-05	0.00E+00
27	e_1029	TAZ1	r_1512	2.84E-06	1.01E-05	0.00E+00
28	e_1029	TAZ1	r_1513	4.41E-06	1.57E-05	0.00E+00
29	e_1029	TAZ1	r_1514	3.68E-06	1.31E-05	0.00E+00
30	e_1029	TAZ1	r_1515	3.74E-06	1.33E-05	0.00E+00
31	e_1029	TAZ1	r_1516	3.21E-06	1.14E-05	0.00E+00
32	e_1029	TAZ1	r_1517	2.87E-06	1.02E-05	0.00E+00
33	e_1029	TAZ1	r_1518	2.54E-06	9.05E-06	0.00E+00
34	e_1029	TAZ1	r_1519	0.00E+00	0.00E+00	0.00E+00
35	e_1029	TAZ1	r_1520	0.00E+00	0.00E+00	0.00E+00
36	e_1029	TAZ1	r_1521	0.00E+00	0.00E+00	0.00E+00
37	e_1029	TAZ1	r_1522	0.00E+00	0.00E+00	0.00E+00
38	e_1029	TAZ1	r_1523	0.00E+00	0.00E+00	0.00E+00
39	e_1029	TAZ1	r_1524	0.00E+00	0.00E+00	0.00E+00
40	e_1029	TAZ1	r_1525	0.00E+00	0.00E+00	0.00E+00
41	e_1029	TAZ1	r_1526	0.00E+00	0.00E+00	0.00E+00
42	e_1029	TAZ1	r_1527	0.00E+00	0.00E+00	0.00E+00
43	e_1029	TAZ1	r_1528	0.00E+00	0.00E+00	0.00E+00
44	e_1029	TAZ1	r_1529	0.00E+00	0.00E+00	0.00E+00
45	e_1029	TAZ1	r_1530	0.00E+00	0.00E+00	0.00E+00
46	e_1029	TAZ1	r_1531	0.00E+00	0.00E+00	0.00E+00
47	e_1029	TAZ1	r_1532	0.00E+00	0.00E+00	0.00E+00
48	e_1029	TAZ1	r_1533	0.00E+00	0.00E+00	0.00E+00
49	e_1029	TAZ1	r_1534	0.00E+00	0.00E+00	0.00E+00
50	e_1029	TAZ1	r_1535	0.00E+00	0.00E+00	0.00E+00
51	e_1029	TAZ1	r_1536	0.00E+00	0.00E+00	0.00E+00
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2	e_1029	TAZ1	r_1537	0.00E+00	0.00E+00	0.00E+00
3	e_1029	TAZ1	r_1538	0.00E+00	0.00E+00	0.00E+00
4	e_1029	TAZ1	r_3963	3.20E-05	1.14E-04	1.60E-05
5	e_1029	TAZ1	r_3964	3.20E-05	1.14E-04	0.00E+00
6	e_1029	TAZ1	r_3965	3.05E-05	1.09E-04	0.00E+00
7	e_1029	TAZ1	r_3966	1.56E-05	5.56E-05	0.00E+00
8	e_1029	TAZ1	r_3967	3.05E-05	1.09E-04	0.00E+00
9	e_1029	TAZ1	r_3968	1.56E-05	5.56E-05	0.00E+00
10	e_1029	TAZ1	r_3969	1.53E-05	5.43E-05	0.00E+00
11	e_1029	TAZ1	r_3970	1.03E-05	3.68E-05	0.00E+00
12	e_1029	TAZ1	r_3971	7.47E-05	8.04E-05	0.00E+00
13	e_1029	TAZ1	r_3972	7.14E-05	7.69E-05	5.50E-06
14	e_1029	TAZ1	r_3974	1.33E-05	3.63E-05	0.00E+00
15	e_1029	TAZ1	r_3975	2.95E-05	3.17E-05	2.27E-06
16	e_1029	TAZ1	r_3976	2.95E-05	3.17E-05	0.00E+00
17	e_1029	TAZ1	r_3977	2.62E-05	2.82E-05	0.00E+00
18	e_1029	TAZ1	r_3978	2.06E-05	2.82E-05	0.00E+00
19	e_1029	TAZ1	r_3979	3.82E-05	5.64E-05	4.03E-06
20	e_1029	TAZ1	r_3980	3.20E-05	5.64E-05	0.00E+00
21	e_1029	TAZ1	r_3981	3.63E-05	5.36E-05	0.00E+00
22	e_1029	TAZ1	r_3982	1.70E-05	5.36E-05	0.00E+00
23	e_1029	TAZ1	r_3983	3.63E-05	5.36E-05	0.00E+00
24	e_1029	TAZ1	r_3984	1.70E-05	5.36E-05	0.00E+00
25	e_1029	TAZ1	r_3985	1.81E-05	5.10E-05	0.00E+00
26	e_1029	TAZ1	r_3986	1.16E-05	4.12E-05	0.00E+00
27	e_1029	TAZ1	r_3988	8.51E-05	3.03E-04	2.93E-05
28	e_1029	TAZ1	r_3989	3.20E-05	1.14E-04	0.00E+00
29	e_1029	TAZ1	r_3990	8.11E-05	2.88E-04	0.00E+00
30	e_1029	TAZ1	r_3991	2.30E-05	8.17E-05	0.00E+00
31	e_1029	TAZ1	r_3992	8.11E-05	2.88E-04	0.00E+00
32	e_1029	TAZ1	r_3993	2.30E-05	8.17E-05	0.00E+00
33	e_1029	TAZ1	r_3994	4.05E-05	1.44E-04	0.00E+00
34	e_1029	TAZ1	r_3995	1.79E-05	6.36E-05	0.00E+00
35	e_1029	TAZ1	r_3997	5.08E-05	1.02E-04	7.28E-06
36	e_1029	TAZ1	r_3998	3.20E-05	1.02E-04	0.00E+00
37	e_1029	TAZ1	r_3999	4.82E-05	9.65E-05	0.00E+00
38	e_1029	TAZ1	r_4000	1.92E-05	6.84E-05	0.00E+00
39	e_1029	TAZ1	r_4001	4.82E-05	9.65E-05	0.00E+00
40	e_1029	TAZ1	r_4002	1.92E-05	6.84E-05	0.00E+00
41	e_1029	TAZ1	r_4003	2.41E-05	8.57E-05	0.00E+00
42	e_1029	TAZ1	r_4004	1.37E-05	4.89E-05	0.00E+00
43	e_1029	TAZ1	r_4006	6.41E-05	1.18E-04	8.41E-06
44	e_1029	TAZ1	r_4007	6.17E-05	1.13E-04	0.00E+00
45	e_1029	TAZ1	r_4008	3.20E-05	1.14E-04	0.00E+00
46	e_1029	TAZ1	r_4009	2.11E-05	7.50E-05	0.00E+00
47	e_1029	TAZ1	r_4010	6.17E-05	1.13E-04	0.00E+00
48	e_1029	TAZ1	r_4011	3.08E-05	1.09E-04	0.00E+00
49	e_1029	TAZ1	r_4012	2.11E-05	7.50E-05	0.00E+00
50	e_1029	TAZ1	r_4013	1.57E-05	5.59E-05	0.00E+00
51	e_1029	TAZ1	r_4014	3.20E-05	1.14E-04	0.00E+00
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2	e_1029	TAZ1	r_4015	2.11E-05	7.50E-05	0.00E+00
3	e_0502	LSB6	r_4016	1.60E-05	5.70E-05	0.00E+00
4	e_0677	STT4	r_4017	1.27E-05	4.52E-05	0.00E+00
5	e_0502	LSB6	r_4018	2.11E-05	7.50E-05	0.00E+00
6	e_0677	STT4	r_4019	1.57E-05	5.59E-05	0.00E+00
7	e_0502	LSB6	r_4020	1.27E-05	4.52E-05	0.00E+00
8	e_0677	STT4	r_4021	1.05E-05	3.75E-05	0.00E+00
9	e_0502	LSB6	r_4022	6.17E-05	1.13E-04	0.00E+00
10	e_0677	STT4	r_4023	3.08E-05	1.09E-04	0.00E+00
11	e_0502	LSB6	r_4024	2.11E-05	7.50E-05	0.00E+00
12	e_0677	STT4	r_4025	1.57E-05	5.59E-05	0.00E+00
13	e_0502	LSB6	r_4026	3.08E-05	1.09E-04	0.00E+00
14	e_0677	STT4	r_4027	2.06E-05	7.32E-05	0.00E+00
15	e_0502	LSB6	r_4028	1.57E-05	5.59E-05	0.00E+00
16	e_0677	STT4	r_4029	1.25E-05	4.46E-05	0.00E+00
17	e_0502	LSB6	r_4030	2.11E-05	7.50E-05	0.00E+00
18	e_0677	STT4	r_4031	1.57E-05	5.59E-05	0.00E+00
19	e_1030	LSB6	r_4032	1.27E-05	4.52E-05	0.00E+00
20	e_1030	LSB6	r_4033	1.05E-05	3.75E-05	0.00E+00
21	e_1030	LSB6	r_4034	1.57E-05	5.59E-05	0.00E+00
22	e_1030	LSB6	r_4035	1.25E-05	4.46E-05	0.00E+00
23	e_1030	LSB6	r_4036	1.05E-05	3.75E-05	0.00E+00
24	e_1030	LSB6	r_4037	9.00E-06	3.20E-05	0.00E+00
25	e_1030	LSB6	r_1542	0.00E+00	0.00E+00	0.00E+00
26	e_1030	LSB6	r_1543	2.05E-07	7.85E-07	7.69E-03
27	e_1031	FRQ1	r_1545	0.00E+00	0.00E+00	0.00E+00
28	e_1032	PIK1	r_1546	3.78E-06	1.35E-05	0.00E+00
29	e_1031	FRQ1	r_1547	1.76E-06	6.27E-06	0.00E+00
30	e_1032	PIK1	r_1548	9.33E-07	3.32E-06	0.00E+00
31	e_1031	FRQ1	r_1549	2.41E-06	8.59E-06	0.00E+00
32	e_1032	PIK1	r_1550	1.69E-06	6.00E-06	0.00E+00
33	e_1031	FRQ1	r_1551	0.00E+00	0.00E+00	0.00E+00
34	e_1032	PIK1	r_1552	4.10E-06	1.46E-05	0.00E+00
35	e_1031	FRQ1	r_1553	1.14E-06	4.06E-06	0.00E+00
36	e_1032	PIK1	r_1554	0.00E+00	0.00E+00	0.00E+00
37	e_1031	FRQ1	r_1560	2.40E-05	8.54E-05	0.00E+00
38	e_1032	PIK1	r_1562	6.12E-05	1.34E-04	2.57E-06
39	e_1031	FRQ1	r_1563	0.00E+00	0.00E+00	0.00E+00
40	e_1032	PIK1	r_1564	0.00E+00	0.00E+00	0.00E+00
41	e_1031	FRQ1	r_1565	0.00E+00	0.00E+00	0.00E+00
42	e_1032	PIK1	r_1566	0.00E+00	0.00E+00	0.00E+00
43	e_0796	PIK1	r_1567	1.94E-04	6.89E-04	1.33E-02
44	e_0796	PIK1	r_1568	9.33E-07	3.32E-06	0.00E+00
45	e_0796	PIK1	r_1572	1.70E-06	6.04E-06	0.00E+00
46	e_0796	PIK1	r_1573	1.70E-06	6.04E-06	0.00E+00
47	e_0796	PIK1	r_1574	4.75E-05	1.69E-04	2.01E-03
48	e_0796	PIK1	r_1575	1.60E-06	5.70E-06	0.00E+00
49	e_0796	PIK1	r_1576	1.60E-06	5.70E-06	0.00E+00
50	e_0796	PIK1	r_1577	1.69E-06	6.00E-06	0.00E+00
51	e_0665	VPS34	r_1578	1.69E-06	6.00E-06	0.00E+00
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2	e_1033	VPS15	r_1579	1.60E-06	5.70E-06	0.00E+00	
3	e_0665	VPS34	r_1580	1.60E-06	5.70E-06	0.00E+00	
4	e_1033	VPS15	r_1581	1.23E-06	4.38E-06	0.00E+00	
5	e_0665	VPS34	r_1582	2.36E-06	8.40E-06	0.00E+00	
6	e_1033	VPS15	r_1583	2.20E-06	7.82E-06	0.00E+00	
7	e_0665	VPS34	r_1585	1.64E-02	1.78E-02	1.31E-03	
8	e_1033	VPS15	r_1586	2.96E-06	1.05E-05	0.00E+00	
9	e_0665	VPS34	r_1587	0.00E+00	0.00E+00	0.00E+00	
10	e_1033	VPS15	r_1588	2.00E+03	2.00E+03	0.00E+00	
11	e_0665	VPS34	r_1589	1.17E-06	4.15E-06	0.00E+00	
12	e_1033	VPS15	r_1590	1.17E-06	4.15E-06	0.00E+00	
13	e_0665	VPS34	r_1591	1.17E-06	4.15E-06	0.00E+00	
14	e_1033	VPS15	r_1595	1.94E-04	6.90E-04	2.01E-03	
15	e_0665	VPS34	r_1596	1.00E+03	1.00E+03	1.31E-03	
16	e_1033	VPS15	r_1597	1.69E-06	6.00E-06	0.00E+00	
17	e_0193	MSS4	r_1598	1.81E-06	6.44E-06	0.00E+00	
18	e_0193	MSS4	r_1599	1.81E-06	6.44E-06	0.00E+00	
19	e_0193	MSS4	r_1600	1.71E-06	6.09E-06	0.00E+00	
20	e_0193	MSS4	r_1601	0.00E+00	0.00E+00	0.00E+00	
21	e_0193	MSS4	r_1603	0.00E+00	0.00E+00	0.00E+00	
22	e_0193	MSS4	r_1604	1.52E-06	5.43E-06	0.00E+00	
23	e_0193	MSS4	r_1605	1.52E-06	5.43E-06	0.00E+00	
24	e_0193	MSS4	r_1606	0.00E+00	0.00E+00	0.00E+00	
25	e_0192	MSS4	r_1607	0.00E+00	0.00E+00	0.00E+00	
26	e_0192	MSS4	r_1608	0.00E+00	0.00E+00	0.00E+00	
27	e_0192	MSS4	r_1609	0.00E+00	0.00E+00	0.00E+00	
28	e_0192	MSS4	r_1610	0.00E+00	0.00E+00	0.00E+00	
29	e_0192	MSS4	r_1611	0.00E+00	0.00E+00	0.00E+00	
30	e_0192	MSS4	r_1613	4.80E-05	1.71E-04	0.00E+00	
31	e_0192	MSS4	r_1614	0.00E+00	0.00E+00	0.00E+00	
32	e_0192	MSS4	r_1615	4.80E-05	1.71E-04	0.00E+00	
33	e_1034	FAB1	r_1616	0.00E+00	0.00E+00	0.00E+00	
34	e_1034	FAB1	r_1617	4.80E-05	1.71E-04	0.00E+00	
35	e_1034	FAB1	r_1618	4.80E-05	1.71E-04	0.00E+00	
36	e_1034	FAB1	r_1620	0.00E+00	0.00E+00	0.00E+00	
37	e_1034	FAB1	r_1622	1.44E-12	5.54E-12	5.42E-08	
38	e_1034	FAB1	r_1623	4.80E-05	1.71E-04	0.00E+00	
39	e_1034	FAB1	r_1624	0.00E+00	0.00E+00	0.00E+00	
40	e_1034	FAB1	r_1625	0.00E+00	0.00E+00	0.00E+00	
41	e_1035	LRO1	r_1627	0.00E+00	0.00E+00	0.00E+00	
42	e_1035	LRO1	r_1628	0.00E+00	0.00E+00	0.00E+00	
43	e_1035	LRO1	r_1629	0.00E+00	0.00E+00	0.00E+00	
44	e_1035	LRO1	r_1630	2.22E-06	7.89E-06	0.00E+00	
45	e_1035	LRO1	r_1631	5.22E-06	1.86E-05	0.00E+00	
46	e_1035	LRO1	r_1632	1.00E+03	1.00E+03	8.68E-01	
47	e_1035	LRO1	r_1633	5.22E-06	1.86E-05	0.00E+00	
48	e_1035	LRO1	r_1634	6.62E-06	2.36E-05	0.00E+00	
49	e_1035	LRO1	r_1635	0.00E+00	0.00E+00	0.00E+00	
50	e_1035	LRO1	r_1637	0.00E+00	0.00E+00	0.00E+00	
51	e_1035	LRO1	r_1638	1.24E-05	4.34E-05	0.00E+00	
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2	e_1035	LRO1	r_1639	0.00E+00	0.00E+00	0.00E+00
3	e_1035	LRO1	r_1640	0.00E+00	0.00E+00	0.00E+00
4	e_1035	LRO1	r_1641	1.13E-06	4.04E-06	0.00E+00
5	e_1035	LRO1	r_1642	1.48E-05	5.26E-05	0.00E+00
6	e_1035	LRO1	r_1643	0.00E+00	0.00E+00	0.00E+00
7	e_1035	LRO1	r_1644	4.80E-05	1.71E-04	0.00E+00
8	e_1035	LRO1	r_1645	4.80E-05	1.71E-04	0.00E+00
9	e_1035	LRO1	r_1647	9.97E-06	3.55E-05	0.00E+00
10	e_1035	LRO1	r_1648	0.00E+00	0.00E+00	0.00E+00
11	e_1035	LRO1	r_1649	0.00E+00	0.00E+00	0.00E+00
12	e_1035	LRO1	r_1650	9.69E-07	3.45E-06	0.00E+00
13	e_1035	LRO1	r_1651	1.89E-06	6.73E-06	0.00E+00
14	e_1035	LRO1	r_1652	2.00E+03	2.00E+03	0.00E+00
15	e_1035	LRO1	r_1654	2.25E-05	8.02E-05	6.80E-02
16	e_1035	LRO1	r_1656	0.00E+00	0.00E+00	0.00E+00
17	e_1035	LRO1	r_1658	0.00E+00	0.00E+00	0.00E+00
18	e_1035	LRO1	r_1659	1.30E-05	4.62E-05	0.00E+00
19	e_1035	LRO1	r_1660	4.80E-05	1.71E-04	0.00E+00
20	e_1035	LRO1	r_1661	4.80E-05	1.71E-04	0.00E+00
21	e_1035	LRO1	r_1663	1.96E+00	2.00E+00	0.00E+00
22	e_1035	LRO1	r_1664	0.00E+00	0.00E+00	0.00E+00
23	e_1035	LRO1	r_1665	2.00E+03	2.00E+03	0.00E+00
24	e_1035	LRO1	r_1667	2.00E+03	2.00E+03	1.62E-02
25	e_1035	LRO1	r_1668	1.96E+00	2.00E+00	0.00E+00
26	e_1035	LRO1	r_1669	2.00E+03	2.00E+03	0.00E+00
27	e_1035	LRO1	r_1671	0.00E+00	0.00E+00	0.00E+00
28	e_1035	LRO1	r_1672	1.96E+00	2.00E+00	3.12E-02
29	e_1035	LRO1	r_1673	1.24E-05	4.34E-05	0.00E+00
30	e_1035	LRO1	r_1674	1.24E-05	4.34E-05	0.00E+00
31	e_1035	LRO1	r_1675	0.00E+00	0.00E+00	0.00E+00
32	e_1035	LRO1	r_1676	8.58E-05	1.75E-04	2.92E-06
33	e_1035	LRO1	r_1677	6.12E-05	1.34E-04	0.00E+00
34	e_1035	LRO1	r_1678	6.12E-05	1.34E-04	0.00E+00
35	e_1035	LRO1	r_1679	6.12E-05	1.34E-04	0.00E+00
36	e_1035	LRO1	r_1680	6.12E-05	1.34E-04	0.00E+00
37	e_1035	LRO1	r_1681	6.12E-05	1.34E-04	0.00E+00
38	e_1035	LRO1	r_1682	1.56E-05	4.80E-05	4.43E-05
39	e_1035	LRO1	r_1683	0.00E+00	0.00E+00	0.00E+00
40	e_1035	LRO1	r_1684	4.22E-05	1.14E-04	0.00E+00
41	e_1035	LRO1	r_1685	0.00E+00	0.00E+00	0.00E+00
42	e_1035	LRO1	r_1686	2.65E-06	9.42E-06	0.00E+00
43	e_1035	LRO1	r_1687	2.65E-06	9.42E-06	0.00E+00
44	e_1035	LRO1	r_1688	3.01E-06	1.07E-05	0.00E+00
45	e_1035	LRO1	r_1689	1.61E-05	5.63E-05	0.00E+00
46	e_1035	LRO1	r_1690	1.28E-05	4.56E-05	0.00E+00
47	e_1035	LRO1	r_1691	1.21E-06	2.94E-06	2.92E-06
48	e_1035	LRO1	r_1694	2.00E+03	2.00E+03	0.00E+00
49	e_1035	LRO1	r_1695	3.01E-06	1.07E-05	0.00E+00
50	e_1035	LRO1	r_1696	3.84E-04	1.37E-03	4.01E-02
51	e_1035	LRO1	r_1697	3.20E-05	1.14E-04	3.12E-02
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2	e_1035	LRO1	r_1698	2.82E-05	9.90E-05	2.92E-06
3	e_1035	LRO1	r_1699	0.00E+00	0.00E+00	0.00E+00
4	e_1035	LRO1	r_1700	1.75E-05	6.21E-05	0.00E+00
5	e_1035	LRO1	r_1701	6.18E-11	2.89E-10	2.83E-06
6	e_1035	LRO1	r_1702	0.00E+00	0.00E+00	0.00E+00
7	e_1035	LRO1	r_1703	4.80E-05	1.71E-04	0.00E+00
8	e_1035	LRO1	r_1704	9.94E-05	2.68E-04	4.06E-05
9	e_1035	LRO1	r_1705	0.00E+00	0.00E+00	0.00E+00
10	e_1035	LRO1	r_1706	0.00E+00	0.00E+00	0.00E+00
11	e_1035	LRO1	r_1707	0.00E+00	0.00E+00	0.00E+00
12	e_1035	LRO1	r_1708	1.94E-04	6.89E-04	1.33E-02
13	e_1035	LRO1	r_1709	0.00E+00	0.00E+00	0.00E+00
14	e_1035	LRO1	r_1710	0.00E+00	0.00E+00	0.00E+00
15	e_1035	LRO1	r_1711	0.00E+00	0.00E+00	0.00E+00
16	e_1035	LRO1	r_1712	0.00E+00	0.00E+00	0.00E+00
17	e_1035	LRO1	r_1713	1.89E-06	6.73E-06	0.00E+00
18	e_1035	LRO1	r_1714	2.05E-06	7.30E-06	0.00E+00
19	e_1035	LRO1	r_1715	0.00E+00	0.00E+00	0.00E+00
20	e_1035	LRO1	r_1716	0.00E+00	0.00E+00	0.00E+00
21	e_1035	LRO1	r_1717	0.00E+00	0.00E+00	0.00E+00
22	e_1035	LRO1	r_1718	0.00E+00	0.00E+00	0.00E+00
23	e_1035	LRO1	r_1719	0.00E+00	0.00E+00	0.00E+00
24	e_1035	LRO1	r_1720	0.00E+00	0.00E+00	0.00E+00
25	e_1035	LRO1	r_1721	0.00E+00	0.00E+00	0.00E+00
26	e_1035	LRO1	r_1722	1.39E-05	4.95E-05	0.00E+00
27	e_1035	LRO1	r_1723	0.00E+00	0.00E+00	0.00E+00
28	e_1035	LRO1	r_1724	1.96E-05	6.98E-05	0.00E+00
29	e_1035	LRO1	r_1725	0.00E+00	0.00E+00	0.00E+00
30	e_1035	LRO1	r_1726	0.00E+00	0.00E+00	0.00E+00
31	e_1035	LRO1	r_1727	6.30E-07	2.24E-06	0.00E+00
32	e_1035	LRO1	r_1728	0.00E+00	0.00E+00	0.00E+00
33	e_1035	LRO1	r_1729	6.50E-10	2.49E-09	2.44E-05
34	e_1035	LRO1	r_1730	0.00E+00	0.00E+00	0.00E+00
35	e_1035	LRO1	r_1731	0.00E+00	0.00E+00	0.00E+00
36	e_1035	LRO1	r_1732	0.00E+00	0.00E+00	0.00E+00
37	e_1035	LRO1	r_1733	0.00E+00	0.00E+00	0.00E+00
38	e_1035	LRO1	r_1734	4.80E-05	1.71E-04	0.00E+00
39	e_1035	LRO1	r_1735	0.00E+00	0.00E+00	0.00E+00
40	e_1035	LRO1	r_1736	1.48E-05	5.26E-05	0.00E+00
41	e_1035	LRO1	r_1737	0.00E+00	0.00E+00	0.00E+00
42	e_1035	LRO1	r_1738	0.00E+00	0.00E+00	0.00E+00
43	e_1035	LRO1	r_1739	0.00E+00	0.00E+00	0.00E+00
44	e_1035	LRO1	r_1743	0.00E+00	0.00E+00	0.00E+00
45	e_1035	LRO1	r_1744	0.00E+00	0.00E+00	0.00E+00
46	e_1035	LRO1	r_1745	0.00E+00	0.00E+00	0.00E+00
47	e_1035	LRO1	r_1746	3.81E+00	3.86E+00	8.43E-04
48	e_1035	LRO1	r_1747	2.74E-05	9.77E-05	0.00E+00
49	e_1035	LRO1	r_1748	1.46E-07	5.59E-07	5.47E-03
50	e_1035	LRO1	r_1749	1.00E-06	3.56E-06	0.00E+00
51	e_1035	LRO1	r_1750	1.00E-06	3.56E-06	0.00E+00
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2	e_1035	LRO1	r_1751	2.74E-05	9.77E-05	0.00E+00
3	e_1035	LRO1	r_1752	2.74E-05	9.77E-05	0.00E+00
4	e_1035	LRO1	r_1753	2.32E-07	8.26E-07	0.00E+00
5	e_1035	LRO1	r_1754	3.31E-06	4.13E-06	4.35E-05
6	e_1035	LRO1	r_1757	2.30E-07	8.18E-07	0.00E+00
7	e_1035	LRO1	r_1758	2.00E+03	2.00E+03	4.35E-05
8	e_1035	LRO1	r_1759	2.74E-05	9.77E-05	0.00E+00
9	e_1035	LRO1	r_1760	2.00E+03	2.00E+03	0.00E+00
10	e_1035	LRO1	r_1761	4.49E-06	1.60E-05	0.00E+00
11	e_1035	LRO1	r_1762	4.49E-06	1.60E-05	0.00E+00
12	e_1035	LRO1	r_1763	1.00E+03	1.00E+03	8.68E-01
13	e_1035	LRO1	r_1764	0.00E+00	0.00E+00	0.00E+00
14	e_1035	LRO1	r_1765	2.44E-06	8.67E-06	0.00E+00
15	e_1035	LRO1	r_1766	0.00E+00	0.00E+00	6.78E-09
16	e_1035	LRO1	r_1770	6.30E-07	2.24E-06	0.00E+00
17	e_1035	LRO1	r_1771	1.75E-05	6.21E-05	0.00E+00
18	e_1035	LRO1	r_1772	2.83E-05	1.01E-04	0.00E+00
19	e_1035	LRO1	r_1774	3.07E-05	1.07E-04	0.00E+00
20	e_1036	NTE1	r_1775	1.89E-05	6.72E-05	0.00E+00
21	e_1036	NTE1	r_1776	7.19E-07	2.56E-06	0.00E+00
22	e_1036	NTE1	r_1777	5.05E-07	1.80E-06	0.00E+00
23	e_1036	NTE1	r_1788	2.32E-07	8.26E-07	0.00E+00
24	e_1036	NTE1	r_1790	0.00E+00	0.00E+00	0.00E+00
25	e_1036	NTE1	r_1791	0.00E+00	0.00E+00	0.00E+00
26	e_1036	NTE1	r_1792	0.00E+00	0.00E+00	0.00E+00
27	e_1036	NTE1	r_1793	3.20E-05	1.14E-04	0.00E+00
28	e_1036	NTE1	r_1794	9.61E-05	3.42E-04	0.00E+00
29	e_1036	NTE1	r_1795	3.20E-05	1.14E-04	0.00E+00
30	e_1036	NTE1	r_1796	4.10E-06	1.46E-05	0.00E+00
31	e_1036	NTE1	r_1797	0.00E+00	0.00E+00	0.00E+00
32	e_1036	NTE1	r_1798	4.10E-06	1.46E-05	0.00E+00
33	e_1036	NTE1	r_1800	0.00E+00	0.00E+00	0.00E+00
34	e_0720	PLB1	r_1801	2.27E-06	8.06E-06	2.92E-06
35	e_0720	PLB1	r_1802	0.00E+00	0.00E+00	0.00E+00
36	e_0720	PLB1	r_1803	2.27E-06	8.06E-06	2.92E-06
37	e_0720	PLB1	r_1805	3.49E-05	1.24E-04	0.00E+00
38	e_0720	PLB1	r_1806	0.00E+00	0.00E+00	0.00E+00
39	e_0720	PLB1	r_1807	0.00E+00	0.00E+00	0.00E+00
40	e_0720	PLB1	r_1808	3.38E-06	1.20E-05	0.00E+00
41	e_0720	PLB1	r_1809	3.81E+00	3.86E+00	8.43E-04
42	e_0720	PLB1	r_1810	7.75E-06	2.76E-05	0.00E+00
43	e_0718	PLB2	r_1811	2.57E-04	9.12E-04	2.41E-02
44	e_0720	PLB1	r_1812	0.00E+00	0.00E+00	0.00E+00
45	e_0718	PLB2	r_1813	0.00E+00	0.00E+00	0.00E+00
46	e_0720	PLB1	r_1814	0.00E+00	0.00E+00	0.00E+00
47	e_0718	PLB2	r_1815	9.70E-06	3.45E-05	0.00E+00
48	e_0720	PLB1	r_1816	9.70E-06	3.45E-05	0.00E+00
49	e_0718	PLB2	r_1817	9.97E-06	3.55E-05	0.00E+00
50	e_0720	PLB1	r_1818	2.22E-06	7.89E-06	0.00E+00
51	e_0718	PLB2	r_1819	0.00E+00	0.00E+00	0.00E+00
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2	e_0720	PLB1	r_1820	0.00E+00	0.00E+00	0.00E+00
3	e_0718	PLB2	r_1821	4.80E-05	1.71E-04	0.00E+00
4	e_0720	PLB1	r_1822	0.00E+00	0.00E+00	0.00E+00
5	e_0718	PLB2	r_1823	0.00E+00	0.00E+00	0.00E+00
6	e_0720	PLB1	r_1824	2.00E+03	2.00E+03	5.46E-02
7	e_0718	PLB2	r_1825	7.27E-05	2.59E-04	5.38E-03
8	e_0720	PLB1	r_1826	9.61E-05	3.42E-04	0.00E+00
9	e_0718	PLB2	r_1827	7.35E-05	2.62E-04	0.00E+00
10	e_0720	PLB1	r_1829	2.00E+03	2.00E+03	0.00E+00
11	e_0718	PLB2	r_1830	2.03E-05	7.24E-05	0.00E+00
12	e_0720	PLB1	r_1831	1.00E+03	1.00E+03	0.00E+00
13	e_0718	PLB2	r_1832	1.96E+00	2.00E+00	1.46E-02
14	e_0720	PLB1	r_1833	2.74E-05	9.77E-05	0.00E+00
15	e_0718	PLB2	r_1834	0.00E+00	0.00E+00	0.00E+00
16	e_0720	PLB1	r_1835	4.59E-07	1.63E-06	0.00E+00
17	e_0718	PLB2	r_1836	4.53E-07	1.61E-06	0.00E+00
18	e_0819	PLB3	r_1837	0.00E+00	0.00E+00	0.00E+00
19	e_0718	PLB2	r_1839	0.00E+00	0.00E+00	0.00E+00
20	e_0819	PLB3	r_1840	3.31E-05	7.27E-05	2.79E-04
21	e_0718	PLB2	r_1841	2.35E-06	8.38E-06	0.00E+00
22	e_0819	PLB3	r_1842	2.35E-06	8.38E-06	0.00E+00
23	e_0718	PLB2	r_1843	9.65E-07	3.44E-06	0.00E+00
24	e_0819	PLB3	r_1844	9.37E-07	3.33E-06	0.00E+00
25	e_0718	PLB2	r_1845	9.65E-07	3.44E-06	0.00E+00
26	e_0819	PLB3	r_1846	0.00E+00	0.00E+00	0.00E+00
27	e_0718	PLB2	r_1847	0.00E+00	0.00E+00	0.00E+00
28	e_0819	PLB3	r_1848	0.00E+00	0.00E+00	0.00E+00
29	e_0718	PLB2	r_1849	2.40E-05	8.54E-05	0.00E+00
30	e_0819	PLB3	r_1850	4.80E-05	1.71E-04	0.00E+00
31	e_0718	PLB2	r_1851	6.12E-05	1.34E-04	0.00E+00
32	e_0819	PLB3	r_1852	6.12E-05	1.34E-04	0.00E+00
33	e_0718	PLB2	r_1853	6.12E-05	1.34E-04	3.59E-05
34	e_0819	PLB3	r_1854	6.12E-05	1.34E-04	0.00E+00
35	e_0718	PLB2	r_1855	6.12E-05	1.34E-04	0.00E+00
36	e_0819	PLB3	r_1856	6.12E-05	1.34E-04	0.00E+00
37	e_0718	PLB2	r_1857	6.12E-05	1.34E-04	0.00E+00
38	e_0819	PLB3	r_1858	6.12E-05	1.34E-04	0.00E+00
39	e_0718	PLB2	r_1859	6.12E-05	1.34E-04	3.33E-05
40	e_0819	PLB3	r_1860	6.12E-05	1.34E-04	0.00E+00
41	e_0819	PLB3	r_1861	1.07E-04	0.00E+00	6.78E-09
42	e_0819	PLB3	r_1862	1.30E-06	4.61E-06	0.00E+00
43	e_0819	PLB3	r_1863	1.71E-06	6.09E-06	0.00E+00
44	e_0819	PLB3	r_1864	1.71E-06	6.09E-06	0.00E+00
45	e_0819	PLB3	r_1865	1.71E-06	6.09E-06	0.00E+00
46	e_0819	PLB3	r_1866	2.20E-06	7.82E-06	0.00E+00
47	e_0819	PLB3	r_1867	1.56E-06	5.54E-06	0.00E+00
48	e_0819	PLB3	r_1868	2.20E-06	7.82E-06	0.00E+00
49	e_0819	PLB3	r_1869	2.20E-06	7.82E-06	0.00E+00
50	e_0819	PLB3	r_1870	2.36E-06	8.40E-06	0.00E+00
51	e_0819	PLB3	r_1871	1.00E+03	1.00E+03	0.00E+00
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2	e_0819	PLB3	r_1872	0.00E+00	0.00E+00	0.00E+00
3	e_1037	PLC1	r_1873	4.31E-06	1.53E-05	0.00E+00
4	e_1037	PLC1	r_1874	1.92E-04	6.84E-04	0.00E+00
5	e_1037	PLC1	r_1875	0.00E+00	0.00E+00	0.00E+00
6	e_1037	PLC1	r_1876	0.00E+00	0.00E+00	0.00E+00
7	e_1037	PLC1	r_1877	0.00E+00	0.00E+00	0.00E+00
8	e_1037	PLC1	r_1878	0.00E+00	0.00E+00	0.00E+00
9	e_1037	PLC1	r_1879	1.72E-06	6.10E-06	0.00E+00
10	e_1037	PLC1	r_1880	3.22E-06	1.15E-05	0.00E+00
11	e_0943	PLC1	r_1881	3.95E-06	1.41E-05	0.00E+00
12	e_0943	PLC1	r_1882	3.69E-05	1.31E-04	0.00E+00
13	e_0943	PLC1	r_1883	1.36E-07	8.06E-06	0.00E+00
14	e_0943	PLC1	r_1884	0.00E+00	0.00E+00	0.00E+00
15	e_0943	PLC1	r_1885	0.00E+00	0.00E+00	0.00E+00
16	e_0943	PLC1	r_1886	0.00E+00	0.00E+00	0.00E+00
17	e_0943	PLC1	r_1887	2.91E-05	1.04E-04	1.12E-03
18	e_0943	PLC1	r_1889	2.65E-06	9.42E-06	0.00E+00
19	e_1038	PGC1	r_1890	0.00E+00	0.00E+00	0.00E+00
20	e_1038	PGC1	r_1891	2.51E-06	8.92E-06	0.00E+00
21	e_1038	PGC1	r_1892	0.00E+00	0.00E+00	0.00E+00
22	e_1038	PGC1	r_1893	1.72E-06	6.13E-06	0.00E+00
23	e_1038	PGC1	r_1895	2.89E-06	1.03E-05	0.00E+00
24	e_1038	PGC1	r_1896	2.89E-06	1.03E-05	0.00E+00
25	e_0599	SPO14	r_1897	1.58E-06	5.61E-06	0.00E+00
26	e_0599	SPO14	r_1898	1.00E+03	1.00E+03	0.00E+00
27	e_0599	SPO14	r_1899	1.69E-06	6.00E-06	0.00E+00
28	e_0599	SPO14	r_1900	1.56E-06	5.57E-06	0.00E+00
29	e_0599	SPO14	r_1901	2.00E+03	2.00E+03	0.00E+00
30	e_0599	SPO14	r_1902	1.31E-07	4.95E-06	0.00E+00
31	e_0599	SPO14	r_1903	1.15E-06	4.10E-06	0.00E+00
32	e_0599	SPO14	r_1904	2.11E-06	7.50E-06	0.00E+00
33	e_0780	INP52	r_1905	2.91E-05	1.04E-04	0.00E+00
34	e_0856	INP53	r_1906	4.51E-06	1.60E-05	0.00E+00
35	e_0780	INP52	r_1907	1.21E-06	2.94E-06	2.92E-06
36	e_0856	INP53	r_1908	0.00E+00	0.00E+00	0.00E+00
37	e_0780	INP52	r_1909	0.00E+00	0.00E+00	0.00E+00
38	e_0856	INP53	r_1910	0.00E+00	0.00E+00	0.00E+00
39	e_0780	INP52	r_1911	2.73E-06	9.71E-06	0.00E+00
40	e_0856	INP53	r_1912	9.29E-07	3.31E-06	0.00E+00
41	e_0780	INP52	r_1913	1.21E-06	4.30E-06	0.00E+00
42	e_0856	INP53	r_1914	2.15E-06	7.66E-06	0.00E+00
43	e_0780	INP52	r_1915	2.68E-07	9.53E-07	0.00E+00
44	e_0856	INP53	r_1916	5.61E-07	2.00E-06	0.00E+00
45	e_0780	INP52	r_1919	0.00E+00	0.00E+00	0.00E+00
46	e_0856	INP53	r_1920	0.00E+00	0.00E+00	0.00E+00
47	e_0780	INP52	r_1921	0.00E+00	0.00E+00	0.00E+00
48	e_0856	INP53	r_1922	0.00E+00	0.00E+00	0.00E+00
49	e_0543	YMR1	r_1923	0.00E+00	0.00E+00	0.00E+00
50	e_0781	INP52	r_1924	0.00E+00	0.00E+00	0.00E+00
51	e_0857	INP53	r_1925	0.00E+00	0.00E+00	0.00E+00
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2	e_0543	YMR1	r_1926	0.00E+00	0.00E+00	0.00E+00
3	e_0781	INP52	r_1927	0.00E+00	0.00E+00	0.00E+00
4	e_0857	INP53	r_1928	0.00E+00	0.00E+00	0.00E+00
5	e_0543	YMR1	r_1929	0.00E+00	0.00E+00	0.00E+00
6	e_0781	INP52	r_1930	2.65E-05	9.10E-05	0.00E+00
7	e_0857	INP53	r_1931	0.00E+00	0.00E+00	0.00E+00
8	e_0543	YMR1	r_1932	1.46E-07	5.59E-07	5.47E-03
9	e_0781	INP52	r_1935	0.00E+00	0.00E+00	0.00E+00
10	e_0857	INP53	r_1936	1.92E-05	6.84E-05	0.00E+00
11	e_0543	YMR1	r_1937	0.00E+00	0.00E+00	0.00E+00
12	e_0781	INP52	r_1938	0.00E+00	0.00E+00	0.00E+00
13	e_0857	INP53	r_1939	0.00E+00	0.00E+00	0.00E+00
14	e_0543	YMR1	r_1940	0.00E+00	0.00E+00	0.00E+00
15	e_0781	INP52	r_1941	0.00E+00	0.00E+00	0.00E+00
16	e_0857	INP53	r_1942	0.00E+00	0.00E+00	0.00E+00
17	e_0543	YMR1	r_1943	0.00E+00	0.00E+00	0.00E+00
18	e_0781	INP52	r_1944	0.00E+00	0.00E+00	0.00E+00
19	e_0857	INP53	r_1945	0.00E+00	0.00E+00	0.00E+00
20	e_0543	YMR1	r_1946	0.00E+00	0.00E+00	0.00E+00
21	e_0781	INP52	r_1947	0.00E+00	0.00E+00	0.00E+00
22	e_0857	INP53	r_1952	5.56E-07	1.98E-06	0.00E+00
23	e_1039	SAC1	r_1963	2.54E-05	8.90E-05	9.28E-05
24	e_1039	SAC1	r_1964	2.54E-05	8.90E-05	9.28E-05
25	e_1039	SAC1	r_1965	1.65E-02	1.81E-02	1.20E-02
26	e_1039	SAC1	r_1966	0.00E+00	0.00E+00	0.00E+00
27	e_1039	SAC1	r_1967	0.00E+00	0.00E+00	0.00E+00
28	e_1039	SAC1	r_1968	0.00E+00	0.00E+00	0.00E+00
29	e_1039	SAC1	r_1970	0.00E+00	0.00E+00	0.00E+00
30	e_1039	SAC1	r_1971	0.00E+00	0.00E+00	0.00E+00
31	e_1040	SAC1	r_1972	0.00E+00	0.00E+00	0.00E+00
32	e_1040	SAC1	r_1974	4.80E-05	1.71E-04	0.00E+00
33	e_1040	SAC1	r_1975	4.80E-05	1.71E-04	0.00E+00
34	e_1040	SAC1	r_1976	3.69E-05	1.31E-04	0.00E+00
35	e_1040	SAC1	r_1977	2.46E-05	8.76E-05	4.64E-05
36	e_1040	SAC1	r_1978	2.69E-05	6.87E-05	2.70E-02
37	e_1040	SAC1	r_1979	3.66E-05	1.19E-04	1.78E-02
38	e_1040	SAC1	r_1980	8.62E-06	3.07E-05	0.00E+00
39	e_0780	INP52	r_1981	4.05E-07	1.44E-06	0.00E+00
40	e_0856	INP53	r_1984	7.19E-07	2.56E-06	0.00E+00
41	e_0780	INP52	r_1987	2.11E-06	7.50E-06	0.00E+00
42	e_0856	INP53	r_1988	4.71E-06	1.68E-05	0.00E+00
43	e_0780	INP52	r_1989	4.71E-06	1.68E-05	0.00E+00
44	e_0856	INP53	r_1990	0.00E+00	0.00E+00	0.00E+00
45	e_0780	INP52	r_1991	8.62E-06	3.07E-05	0.00E+00
46	e_0856	INP53	r_1992	3.66E-05	1.19E-04	1.78E-02
47	e_0780	INP52	r_1993	4.59E-07	1.63E-06	0.00E+00
48	e_0856	INP53	r_1994	4.53E-07	1.61E-06	0.00E+00
49	e_0780	INP52	r_1995	1.21E-06	2.94E-06	2.92E-06
50	e_0856	INP53	r_1996	1.48E-05	5.26E-05	0.00E+00
51	e_0780	INP52	r_1997	0.00E+00	0.00E+00	0.00E+00
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2	e_0856	INP53	r_1998	1.13E-06	4.04E-06	0.00E+00
3	e_0780	INP52	r_1999	0.00E+00	0.00E+00	0.00E+00
4	e_0856	INP53	r_2000	9.57E-07	3.40E-06	0.00E+00
5	e_0781	INP52	r_2001	1.21E-06	4.30E-06	0.00E+00
6	e_0857	INP53	r_2002	1.21E-06	4.30E-06	0.00E+00
7	e_0781	INP52	r_2003	1.17E-06	4.15E-06	0.00E+00
8	e_0857	INP53	r_2004	0.00E+00	0.00E+00	0.00E+00
9	e_0781	INP52	r_2005	7.05E-06	2.51E-05	4.00E-02
10	e_0857	INP53	r_2008	0.00E+00	0.00E+00	0.00E+00
11	e_0781	INP52	r_2020	0.00E+00	0.00E+00	0.00E+00
12	e_0857	INP53	r_2022	0.00E+00	0.00E+00	6.78E-09
13	e_0781	INP52	r_2023	0.00E+00	0.00E+00	0.00E+00
14	e_0857	INP53	r_2024	2.11E-06	7.50E-06	0.00E+00
15	e_0781	INP52	r_2025	0.00E+00	0.00E+00	0.00E+00
16	e_0857	INP53	r_2026	4.80E-05	1.71E-04	0.00E+00
17	e_0781	INP52	r_2027	4.80E-05	1.71E-04	0.00E+00
18	e_0857	INP53	r_2028	0.00E+00	0.00E+00	0.00E+00
19	e_0781	INP52	r_2030	1.47E-10	6.85E-10	6.71E-06
20	e_0857	INP53	r_2031	7.55E-05	2.69E-04	0.00E+00
21	e_1039	SAC1	r_2032	2.56E-04	9.11E-04	1.75E-02
22	e_1039	SAC1	r_2033	5.22E-06	1.86E-05	0.00E+00
23	e_1039	SAC1	r_2036	0.00E+00	0.00E+00	0.00E+00
24	e_1039	SAC1	r_2037	8.62E-06	3.07E-05	0.00E+00
25	e_1039	SAC1	r_2038	0.00E+00	0.00E+00	0.00E+00
26	e_1039	SAC1	r_2039	0.00E+00	0.00E+00	0.00E+00
27	e_1039	SAC1	r_2040	0.00E+00	0.00E+00	0.00E+00
28	e_1039	SAC1	r_2041	0.00E+00	0.00E+00	0.00E+00
29	e_1040	SAC1	r_2042	0.00E+00	0.00E+00	0.00E+00
30	e_1040	SAC1	r_2043	0.00E+00	0.00E+00	0.00E+00
31	e_1040	SAC1	r_2044	0.00E+00	0.00E+00	0.00E+00
32	e_1040	SAC1	r_2045	1.29E-04	4.56E-04	1.20E-02
33	e_1040	SAC1	r_2046	8.68E-07	3.09E-06	0.00E+00
34	e_1040	SAC1	r_2049	0.00E+00	0.00E+00	0.00E+00
35	e_1040	SAC1	r_2050	0.00E+00	0.00E+00	0.00E+00
36	e_1040	SAC1	r_2051	1.02E-06	3.62E-06	0.00E+00
37	e_0780	INP52	r_2052	6.70E-07	2.38E-06	0.00E+00
38	e_0856	INP53	r_2053	3.32E-06	4.24E-06	4.64E-05
39	e_0780	INP52	r_2054	3.32E-06	4.24E-06	4.64E-05
40	e_0856	INP53	r_2055	4.05E-07	1.44E-06	0.00E+00
41	e_0780	INP52	r_2056	3.64E-06	1.29E-05	0.00E+00
42	e_0856	INP53	r_2057	3.64E-06	1.29E-05	0.00E+00
43	e_0780	INP52	r_2058	0.00E+00	0.00E+00	0.00E+00
44	e_0856	INP53	r_2060	1.22E-05	4.33E-05	5.24E-04
45	e_0780	INP52	r_2061	1.22E-05	4.33E-05	0.00E+00
46	e_0856	INP53	r_2062	0.00E+00	0.00E+00	0.00E+00
47	e_0780	INP52	r_2063	2.74E-05	9.77E-05	0.00E+00
48	e_0856	INP53	r_2064	1.75E-05	6.21E-05	0.00E+00
49	e_0780	INP52	r_2065	1.75E-05	6.21E-05	0.00E+00
50	e_0856	INP53	r_2066	0.00E+00	0.00E+00	0.00E+00
51	e_0780	INP52	r_2067	0.00E+00	0.00E+00	0.00E+00
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2	e_0856	INP53	r_2068	0.00E+00	0.00E+00	0.00E+00
3	e_0781	INP52	r_2069	0.00E+00	0.00E+00	0.00E+00
4	e_0857	INP53	r_2070	0.00E+00	0.00E+00	0.00E+00
5	e_0781	INP52	r_2071	0.00E+00	0.00E+00	0.00E+00
6	e_0857	INP53	r_2072	1.64E-02	1.78E-02	0.00E+00
7	e_0781	INP52	r_2073	0.00E+00	0.00E+00	0.00E+00
8	e_0857	INP53	r_2074	4.80E-05	1.71E-04	0.00E+00
9	e_0781	INP52	r_2075	0.00E+00	0.00E+00	0.00E+00
10	e_0857	INP53	r_2080	1.75E-05	6.21E-05	0.00E+00
11	e_0781	INP52	r_2082	0.00E+00	0.00E+00	0.00E+00
12	e_0857	INP53	r_2083	9.37E-07	3.33E-06	0.00E+00
13	e_0781	INP52	r_2084	9.37E-07	3.33E-06	0.00E+00
14	e_0857	INP53	r_2085	9.37E-07	3.33E-06	0.00E+00
15	e_0781	INP52	r_2086	0.00E+00	0.00E+00	0.00E+00
16	e_0857	INP53	r_2087	0.00E+00	0.00E+00	0.00E+00
17	e_0781	INP52	r_2089	0.00E+00	0.00E+00	0.00E+00
18	e_0857	INP53	r_2090	0.00E+00	0.00E+00	0.00E+00
19	e_0459	INP51	r_2091	9.24E-06	3.29E-05	0.00E+00
20	e_0780	INP52	r_2092	0.00E+00	0.00E+00	0.00E+00
21	e_0856	INP53	r_2093	2.00E+03	2.00E+03	1.75E-02
22	e_0459	INP51	r_2094	1.06E-04	2.95E-04	4.39E-05
23	e_0780	INP52	r_2095	0.00E+00	0.00E+00	0.00E+00
24	e_0856	INP53	r_2096	3.84E-04	1.37E-03	1.42E-01
25	e_0459	INP51	r_2097	2.00E+03	2.00E+03	0.00E+00
26	e_0780	INP52	r_2098	3.57E-05	1.27E-04	0.00E+00
27	e_0856	INP53	r_2099	2.74E-05	9.77E-05	0.00E+00
28	e_0459	INP51	r_2100	1.96E+00	2.00E+00	1.92E-01
29	e_0780	INP52	r_2101	2.22E-06	7.89E-06	0.00E+00
30	e_0856	INP53	r_2102	0.00E+00	0.00E+00	0.00E+00
31	e_0459	INP51	r_2103	0.00E+00	0.00E+00	0.00E+00
32	e_0780	INP52	r_2104	0.00E+00	0.00E+00	0.00E+00
33	e_0856	INP53	r_2105	0.00E+00	0.00E+00	0.00E+00
34	e_0459	INP51	r_2106	2.43E-07	8.64E-07	0.00E+00
35	e_0780	INP52	r_2107	2.77E-05	9.85E-05	0.00E+00
36	e_0856	INP53	r_2108	1.81E-07	6.92E-07	6.78E-03
37	e_0459	INP51	r_2110	0.00E+00	0.00E+00	0.00E+00
38	e_0780	INP52	r_2111	1.81E-07	6.92E-07	6.78E-03
39	e_0856	INP53	r_2125	2.00E+03	2.00E+03	1.20E-04
40	e_0459	INP51	r_2129	1.92E-04	6.84E-04	0.00E+00
41	e_0780	INP52	r_2133	0.00E+00	0.00E+00	0.00E+00
42	e_0856	INP53	r_2134	2.59E-07	9.20E-07	0.00E+00
43	e_0460	INP51	r_2136	2.59E-07	9.20E-07	0.00E+00
44	e_0781	INP52	r_2137	2.32E-07	8.26E-07	0.00E+00
45	e_0857	INP53	r_2139	2.32E-07	8.26E-07	0.00E+00
46	e_0460	INP51	r_2184	7.19E-07	2.56E-06	0.00E+00
47	e_0781	INP52	r_2185	6.30E-07	2.24E-06	0.00E+00
48	e_0857	INP53	r_2186	5.61E-07	2.00E-06	0.00E+00
49	e_0460	INP51	r_2187	9.68E-07	3.45E-06	0.00E+00
50	e_0781	INP52	r_2188	8.13E-07	2.89E-06	0.00E+00
51	e_0857	INP53	r_2189	4.00E-07	1.42E-06	0.00E+00
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2	e_0460	INP51	r_2190	9.68E-07	3.45E-06	0.00E+00
3	e_0781	INP52	r_2191	8.13E-07	2.89E-06	0.00E+00
4	e_0857	INP53	r_2192	4.00E-07	1.42E-06	0.00E+00
5	e_0460	INP51	r_2193	5.05E-07	1.80E-06	0.00E+00
6	e_0781	INP52	r_2229	9.68E-07	3.45E-06	0.00E+00
7	e_0857	INP53	r_2230	8.13E-07	2.89E-06	0.00E+00
8	e_0460	INP51	r_2231	2.05E-05	7.28E-05	0.00E+00
9	e_0781	INP52	r_2812	0.00E+00	0.00E+00	0.00E+00
10	e_0857	INP53	r_2813	0.00E+00	0.00E+00	0.00E+00
11	e_0460	INP51	r_2814	0.00E+00	0.00E+00	0.00E+00
12	e_0781	INP52	r_2815	0.00E+00	0.00E+00	0.00E+00
13	e_0857	INP53	r_2816	0.00E+00	0.00E+00	0.00E+00
14	e_0460	INP51	r_2817	0.00E+00	0.00E+00	0.00E+00
15	e_0781	INP52	r_2818	0.00E+00	0.00E+00	0.00E+00
16	e_0857	INP53	r_2819	0.00E+00	0.00E+00	0.00E+00
17	e_1041	INP54	r_3332	4.80E-05	1.71E-04	0.00E+00
18	e_1041	INP54	r_3333	4.80E-05	1.71E-04	0.00E+00
19	e_1041	INP54	r_3334	4.80E-05	1.71E-04	0.00E+00
20	e_1041	INP54	r_3335	4.80E-05	1.71E-04	0.00E+00
21	e_1041	INP54	r_3336	4.80E-05	1.71E-04	0.00E+00
22	e_1041	INP54	r_3337	4.80E-05	1.71E-04	0.00E+00
23	e_1041	INP54	r_3338	4.80E-05	1.71E-04	0.00E+00
24	e_1041	INP54	r_3339	4.80E-05	1.71E-04	0.00E+00
25	e_1042	VAC14	r_3340	4.80E-05	1.71E-04	0.00E+00
26	e_1043	FIG4	r_3341	4.80E-05	1.71E-04	0.00E+00
27	e_1042	VAC14	r_3342	4.80E-05	1.71E-04	0.00E+00
28	e_1043	FIG4	r_3343	4.80E-05	1.71E-04	0.00E+00
29	e_1042	VAC14	r_3344	4.80E-05	1.71E-04	0.00E+00
30	e_1043	FIG4	r_3345	4.80E-05	1.71E-04	0.00E+00
31	e_1042	VAC14	r_3346	4.80E-05	1.71E-04	0.00E+00
32	e_1043	FIG4	r_3347	4.80E-05	1.71E-04	0.00E+00
33	e_1042	VAC14	r_3508	1.75E-05	6.21E-05	0.00E+00
34	e_1043	FIG4	r_3509	2.83E-05	1.01E-04	0.00E+00
35	e_1042	VAC14	r_3510	2.00E+03	2.00E+03	0.00E+00
36	e_1043	FIG4	r_3511	2.00E+03	2.00E+03	0.00E+00
37	e_1042	VAC14	r_3512	2.00E+03	2.00E+03	0.00E+00
38	e_1043	FIG4	r_3513	2.00E+03	2.00E+03	0.00E+00
39	e_1042	VAC14	r_3514	1.90E-04	4.06E-04	8.76E-06
40	e_1043	FIG4	r_3515	2.00E+03	2.00E+03	0.00E+00
41	e_1007	DPP1	r_3516	2.00E+03	2.00E+03	0.00E+00
42	e_1007	DPP1	r_3517	2.00E+03	2.00E+03	2.08E-05
43	e_1007	DPP1	r_3518	2.00E+03	2.00E+03	0.00E+00
44	e_1007	DPP1	r_3519	2.00E+03	2.00E+03	8.42E-06
45	e_1007	DPP1	r_3520	2.00E+03	2.00E+03	0.00E+00
46	e_1007	DPP1	r_3521	6.67E-06	2.37E-05	0.00E+00
47	e_1007	DPP1	r_3522	4.12E-06	1.47E-05	0.00E+00
48	e_1007	DPP1	r_3523	2.00E+03	2.00E+03	0.00E+00
49	e_1008	LPP1	r_3524	2.00E+03	2.00E+03	0.00E+00
50	e_1008	LPP1	r_3525	6.53E-04	1.45E-03	8.91E-06
51	e_1008	LPP1	r_3526	2.89E-04	6.12E-04	1.50E-04
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2	e_1008	LPP1	r_3527	1.90E-04	4.06E-04	8.76E-06
3	e_1008	LPP1	r_3528	2.00E+03	2.00E+03	3.80E-05
4	e_1008	LPP1	r_3529	3.81E-04	8.12E-04	1.75E-05
5	e_1008	LPP1	r_3530	3.81E-04	8.12E-04	1.75E-05
6	e_1008	LPP1	r_3531	3.61E-05	1.28E-04	7.05E-05
7	e_1044	PHM8	r_3532	3.61E-05	1.28E-04	7.05E-05
8	e_1044	PHM8	r_3533	3.61E-05	1.28E-04	7.05E-05
9	e_1044	PHM8	r_3534	1.19E-04	4.22E-04	6.50E-05
10	e_1044	PHM8	r_3535	1.07E-04	3.80E-04	0.00E+00
11	e_1007	DPP1	r_3536	2.00E+03	2.00E+03	6.20E-05
12	e_1007	DPP1	r_3537	1.07E-04	2.35E-04	0.00E+00
13	e_1007	DPP1	r_3538	9.32E-05	2.47E-04	6.50E-05
14	e_1007	DPP1	r_3539	7.38E-05	1.99E-04	0.00E+00
15	e_1008	LPP1	r_3540	7.64E-05	1.88E-04	6.50E-05
16	e_1008	LPP1	r_3541	0.00E+00	0.00E+00	0.00E+00
17	e_1008	LPP1	r_3542	4.22E-05	1.14E-04	0.00E+00
18	e_1008	LPP1	r_3543	2.00E+03	2.00E+03	2.92E-06
19	e_1008	LPP1	r_3544	2.00E+03	2.00E+03	2.92E-06
20	e_0578	TGL1	r_3545	4.92E-06	1.75E-05	4.06E-05
21	e_0613	YEH1	r_3546	6.47E-05	1.47E-04	2.44E-05
22	e_0578	TGL1	r_3547	1.48E-05	5.25E-05	8.78E-05
23	e_0613	YEH1	r_3548	1.48E-05	5.25E-05	8.78E-05
24	e_0613	YEH1	r_3549	0.00E+00	0.00E+00	0.00E+00
25	e_0613	YEH1	r_3550	0.00E+00	0.00E+00	0.00E+00
26	e_0613	YEH1	r_3551	0.00E+00	0.00E+00	0.00E+00
27	e_0613	YEH1	r_3552	2.00E+03	2.00E+03	5.50E-06
28	e_0613	YEH1	r_3553	2.74E-05	9.77E-05	0.00E+00
29	e_0613	YEH1	r_3554	1.93E-04	3.44E-04	1.18E-04
30	e_0613	YEH1	r_3555	7.17E-05	2.25E-04	0.00E+00
31	e_0628	YEH2	r_3556	1.03E-04	2.73E-04	0.00E+00
32	e_0628	YEH2	r_3557	7.17E-05	2.25E-04	0.00E+00
33	e_0611	TGL4	r_3558	1.03E-04	2.73E-04	0.00E+00
34	e_0765	TGL3	r_3559	7.17E-05	2.25E-04	0.00E+00
35	e_0851	TGL5	r_3560	5.95E-05	2.12E-04	0.00E+00
36	e_1045	LDH1	r_3561	5.95E-05	2.12E-04	0.00E+00
37	e_0611	TGL4	r_3562	4.80E-05	1.71E-04	1.60E-05
38	e_0765	TGL3	r_3563	8.00E-05	2.85E-04	0.00E+00
39	e_0851	TGL5	r_3564	7.86E-05	2.80E-04	0.00E+00
40	e_1045	LDH1	r_3565	6.37E-05	2.27E-04	0.00E+00
41	e_0611	TGL4	r_3566	7.86E-05	2.80E-04	0.00E+00
42	e_0765	TGL3	r_3567	6.37E-05	2.27E-04	0.00E+00
43	e_0851	TGL5	r_3568	6.33E-05	2.25E-04	0.00E+00
44	e_1045	LDH1	r_3569	5.84E-05	2.08E-04	0.00E+00
45	e_0611	TGL4	r_3570	1.13E-05	3.97E-05	0.00E+00
46	e_0765	TGL3	r_3571	2.00E+03	2.00E+03	2.27E-06
47	e_0851	TGL5	r_3572	2.00E+03	2.00E+03	0.00E+00
48	e_1045	LDH1	r_3573	2.00E+03	2.00E+03	0.00E+00
49	e_0611	TGL4	r_3574	2.00E+03	2.00E+03	0.00E+00
50	e_0765	TGL3	r_3575	2.00E+03	2.00E+03	0.00E+00
51	e_0851	TGL5	r_3576	2.00E+03	2.00E+03	0.00E+00
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2	e_1045	LDH1	r_3577	2.00E+03	2.00E+03	1.20E-04
3	e_0611	TGL4	r_3578	2.00E+03	2.00E+03	0.00E+00
4	e_0765	TGL3	r_3579	2.00E+03	2.00E+03	0.00E+00
5	e_0851	TGL5	r_3580	2.00E+03	2.00E+03	0.00E+00
6	e_1045	LDH1	r_3581	8.11E-05	2.88E-04	0.00E+00
7	e_0611	TGL4	r_3582	4.61E-05	1.64E-04	0.00E+00
8	e_0765	TGL3	r_3583	4.61E-05	1.64E-04	0.00E+00
9	e_0851	TGL5	r_3584	4.61E-05	1.64E-04	0.00E+00
10	e_1045	LDH1	r_3585	2.00E+03	2.00E+03	2.27E-06
11	e_0611	TGL4	r_3586	2.00E+03	2.00E+03	2.27E-06
12	e_0765	TGL3	r_3587	2.00E+03	2.00E+03	2.27E-06
13	e_0851	TGL5	r_3588	1.64E-04	3.13E-04	1.18E-04
14	e_1045	LDH1	r_3589	5.95E-05	2.12E-04	0.00E+00
15	e_0611	TGL4	r_3590	8.91E-05	2.58E-04	0.00E+00
16	e_0765	TGL3	r_3591	5.95E-05	2.12E-04	0.00E+00
17	e_0851	TGL5	r_3592	8.91E-05	2.58E-04	0.00E+00
18	e_1045	LDH1	r_3593	5.95E-05	2.12E-04	0.00E+00
19	e_0611	TGL4	r_3594	5.95E-05	2.12E-04	0.00E+00
20	e_0765	TGL3	r_3595	5.95E-05	2.12E-04	0.00E+00
21	e_0851	TGL5	r_3596	2.74E-05	9.77E-05	0.00E+00
22	e_1045	LDH1	r_3597	1.19E-05	4.22E-05	0.00E+00
23	e_0611	TGL4	r_3598	0.00E+00	0.00E+00	0.00E+00
24	e_0765	TGL3	r_3599	2.00E+03	2.00E+03	0.00E+00
25	e_0851	TGL5	r_3600	2.00E+03	2.00E+03	0.00E+00
26	e_1045	LDH1	r_3601	4.80E-05	1.71E-04	0.00E+00
27	e_0611	TGL4	r_3602	4.80E-05	1.71E-04	0.00E+00
28	e_0765	TGL3	r_3603	4.80E-05	1.71E-04	0.00E+00
29	e_0851	TGL5	r_3604	4.80E-05	1.71E-04	0.00E+00
30	e_1045	LDH1	r_3605	4.80E-05	1.71E-04	0.00E+00
31	e_0611	TGL4	r_3606	1.07E-05	3.78E-05	0.00E+00
32	e_0765	TGL3	r_3607	1.14E-06	4.06E-06	0.00E+00
33	e_0851	TGL5	r_3608	1.07E-05	3.78E-05	0.00E+00
34	e_1045	LDH1	r_3609	2.74E-05	9.77E-05	0.00E+00
35	e_0611	TGL4	r_3610	1.07E-05	3.78E-05	0.00E+00
36	e_0765	TGL3	r_3611	2.74E-05	9.77E-05	0.00E+00
37	e_0851	TGL5	r_3612	0.00E+00	0.00E+00	0.00E+00
38	e_1045	LDH1	r_3613	0.00E+00	0.00E+00	0.00E+00
39	e_0611	TGL4	r_3614	2.00E+03	2.00E+03	0.00E+00
40	e_0765	TGL3	r_3615	2.00E+03	2.00E+03	0.00E+00
41	e_0851	TGL5	r_3616	7.20E-05	2.56E-04	0.00E+00
42	e_1045	LDH1	r_3617	7.20E-05	2.56E-04	0.00E+00
43	e_0611	TGL4	r_3618	7.20E-05	2.56E-04	0.00E+00
44	e_0765	TGL3	r_3619	7.20E-05	2.56E-04	0.00E+00
45	e_0851	TGL5	r_3620	7.20E-05	2.56E-04	0.00E+00
46	e_1045	LDH1	r_3621	7.20E-05	2.56E-04	0.00E+00
47	e_0611	TGL4	r_3622	7.20E-05	2.56E-04	0.00E+00
48	e_0765	TGL3	r_3623	7.20E-05	2.56E-04	0.00E+00
49	e_0851	TGL5	r_3624	9.61E-05	3.42E-04	0.00E+00
50	e_1045	LDH1	r_3625	9.61E-05	3.42E-04	0.00E+00
51	e_0611	TGL4	r_3626	9.61E-05	3.42E-04	0.00E+00
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2	e_0765	TGL3	r_3627	9.61E-05	3.42E-04	0.00E+00
3	e_0851	TGL5	r_3628	9.61E-05	3.42E-04	0.00E+00
4	e_1045	LDH1	r_3629	9.61E-05	3.42E-04	0.00E+00
5	e_0611	TGL4	r_3630	9.61E-05	3.42E-04	0.00E+00
6	e_0765	TGL3	r_3631	9.61E-05	3.42E-04	0.00E+00
7	e_0851	TGL5	r_3632	2.40E-05	8.54E-05	0.00E+00
8	e_1045	LDH1	r_3633	2.40E-05	8.54E-05	0.00E+00
9	e_0611	TGL4	r_3634	2.40E-05	8.54E-05	0.00E+00
10	e_0765	TGL3	r_3635	2.40E-05	8.54E-05	0.00E+00
11	e_0851	TGL5	r_3636	2.40E-05	8.54E-05	0.00E+00
12	e_1045	LDH1	r_3637	2.40E-05	8.54E-05	0.00E+00
13	e_0611	TGL4	r_3638	2.40E-05	8.54E-05	0.00E+00
14	e_0765	TGL3	r_3639	2.40E-05	8.54E-05	0.00E+00
15	e_0851	TGL5	r_3640	0.00E+00	0.00E+00	0.00E+00
16	e_1045	LDH1	r_3641	0.00E+00	0.00E+00	0.00E+00
17	e_0611	TGL4	r_3642	0.00E+00	0.00E+00	0.00E+00
18	e_0765	TGL3	r_3643	0.00E+00	0.00E+00	0.00E+00
19	e_0851	TGL5	r_3644	0.00E+00	0.00E+00	0.00E+00
20	e_1045	LDH1	r_3645	0.00E+00	0.00E+00	0.00E+00
21	e_0611	TGL4	r_3646	0.00E+00	0.00E+00	0.00E+00
22	e_0765	TGL3	r_3647	0.00E+00	0.00E+00	0.00E+00
23	e_0851	TGL5	r_3648	4.80E-05	1.71E-04	0.00E+00
24	e_1045	LDH1	r_3649	4.80E-05	1.71E-04	0.00E+00
25	e_0611	TGL4	r_3650	2.40E-04	6.83E-04	0.00E+00
26	e_0765	TGL3	r_3651	4.80E-05	1.71E-04	0.00E+00
27	e_0851	TGL5	r_3652	4.80E-05	1.71E-04	0.00E+00
28	e_1045	LDH1	r_3653	1.92E-04	5.12E-04	0.00E+00
29	e_0611	TGL4	r_3654	2.40E-05	8.54E-05	0.00E+00
30	e_0765	TGL3	r_3655	2.40E-05	8.54E-05	0.00E+00
31	e_0851	TGL5	r_3656	2.40E-05	8.54E-05	0.00E+00
32	e_1045	LDH1	r_3657	2.40E-05	8.54E-05	0.00E+00
33	e_0611	TGL4	r_3658	2.40E-05	8.54E-05	0.00E+00
34	e_0765	TGL3	r_3659	2.40E-05	8.54E-05	0.00E+00
35	e_0851	TGL5	r_3660	2.40E-05	8.54E-05	0.00E+00
36	e_1045	LDH1	r_3661	2.40E-05	8.54E-05	0.00E+00
37	e_0611	TGL4	r_3662	1.07E-04	2.35E-04	0.00E+00
38	e_0765	TGL3	r_3663	1.07E-04	2.35E-04	0.00E+00
39	e_0851	TGL5	r_3664	2.40E-04	6.83E-04	0.00E+00
40	e_1045	LDH1	r_3665	1.92E-04	5.12E-04	0.00E+00
41	e_0611	TGL4	r_3666	4.80E-05	1.71E-04	0.00E+00
42	e_0765	TGL3	r_3667	4.80E-05	1.71E-04	0.00E+00
43	e_0851	TGL5	r_3668	1.07E-04	2.35E-04	0.00E+00
44	e_1045	LDH1	r_3669	1.93E-04	5.14E-04	3.66E-05
45	e_0611	TGL4	r_3670	0.00E+00	0.00E+00	0.00E+00
46	e_0765	TGL3	r_3671	0.00E+00	0.00E+00	0.00E+00
47	e_0851	TGL5	r_3672	5.36E-05	1.17E-04	0.00E+00
48	e_1045	LDH1	r_3673	3.69E-05	9.93E-05	0.00E+00
49	e_0611	TGL4	r_3674	4.05E-05	1.03E-04	0.00E+00
50	e_0765	TGL3	r_3675	3.69E-05	9.93E-05	0.00E+00
51	e_0851	TGL5	r_3676	4.05E-05	1.03E-04	0.00E+00
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2	e_1045	LDH1	r_3677	3.69E-05	9.93E-05	0.00E+00
3	e_0611	TGL4	r_3678	0.00E+00	0.00E+00	0.00E+00
4	e_0765	TGL3	r_3679	0.00E+00	0.00E+00	0.00E+00
5	e_0851	TGL5	r_3680	0.00E+00	0.00E+00	0.00E+00
6	e_1045	LDH1	r_3681	2.00E+03	2.00E+03	0.00E+00
7	e_0611	TGL4	r_3682	2.00E+03	2.00E+03	0.00E+00
8	e_0765	TGL3	r_3683	2.00E+03	2.00E+03	0.00E+00
9	e_0851	TGL5	r_3684	2.00E+03	2.00E+03	0.00E+00
10	e_1045	LDH1	r_3685	1.37E-04	2.15E-04	1.18E-04
11	e_0765	TGL3	r_3686	5.95E-05	2.12E-04	0.00E+00
12	e_0765	TGL3	r_3687	8.91E-05	2.11E-04	0.00E+00
13	e_0765	TGL3	r_3688	5.49E-05	1.95E-04	0.00E+00
14	e_0765	TGL3	r_3689	5.95E-05	2.12E-04	0.00E+00
15	e_0765	TGL3	r_3690	5.95E-05	2.12E-04	0.00E+00
16	e_0765	TGL3	r_3691	4.85E-05	1.73E-04	0.00E+00
17	e_0765	TGL3	r_3692	5.49E-05	1.95E-04	0.00E+00
18	e_0765	TGL3	r_3693	8.91E-05	2.11E-04	0.00E+00
19	e_0765	TGL3	r_3694	5.95E-05	2.12E-04	0.00E+00
20	e_1046	TGL2	r_3695	5.83E-05	2.07E-04	0.00E+00
21	e_1046	TGL2	r_3696	5.49E-05	1.95E-04	0.00E+00
22	e_1046	TGL2	r_3697	4.85E-05	1.73E-04	0.00E+00
23	e_1047	YJU3	r_3698	5.95E-05	2.12E-04	0.00E+00
24	e_1047	YJU3	r_3699	4.32E-05	1.54E-04	0.00E+00
25	e_1047	YJU3	r_3700	5.49E-05	1.95E-04	0.00E+00
26	e_1047	YJU3	r_3701	8.91E-05	2.11E-04	0.00E+00
27	e_0765	TGL3	r_3702	5.95E-05	2.12E-04	0.00E+00
28	e_0765	TGL3	r_3703	5.83E-05	2.07E-04	0.00E+00
29	e_0765	TGL3	r_3704	5.49E-05	1.95E-04	0.00E+00
30	e_0765	TGL3	r_3705	4.85E-05	1.73E-04	0.00E+00
31	e_0611	TGL4	r_3706	5.95E-05	2.12E-04	0.00E+00
32	e_0611	TGL4	r_3707	4.32E-05	1.54E-04	0.00E+00
33	e_0611	TGL4	r_3708	5.49E-05	1.95E-04	0.00E+00
34	e_0611	TGL4	r_3709	5.83E-05	2.07E-04	0.00E+00
35	e_0611	TGL4	r_3710	5.95E-05	2.12E-04	0.00E+00
36	e_0611	TGL4	r_3711	4.80E-05	1.71E-04	0.00E+00
37	e_0611	TGL4	r_3712	5.49E-05	1.95E-04	0.00E+00
38	e_0611	TGL4	r_3713	4.32E-05	1.54E-04	0.00E+00
39	e_0611	TGL4	r_3714	5.95E-05	2.12E-04	0.00E+00
40	e_0611	TGL4	r_3715	4.00E-05	1.42E-04	0.00E+00
41	e_0611	TGL4	r_3716	5.49E-05	1.95E-04	0.00E+00
42	e_0611	TGL4	r_3717	2.74E-05	9.77E-05	0.00E+00
43	e_0611	TGL4	r_3718	2.74E-05	9.77E-05	0.00E+00
44	e_0611	TGL4	r_3719	2.74E-05	9.77E-05	0.00E+00
45	e_0611	TGL4	r_3720	2.74E-05	9.77E-05	0.00E+00
46	e_0611	TGL4	r_3721	2.74E-05	9.77E-05	0.00E+00
47	e_1048	IPT1	r_3722	2.74E-05	9.77E-05	0.00E+00
48	e_1048	IPT1	r_3723	2.74E-05	9.77E-05	0.00E+00
49	e_1048	IPT1	r_3724	2.74E-05	9.77E-05	0.00E+00
50	e_1048	IPT1	r_3725	2.74E-05	9.77E-05	0.00E+00
51	e_1048	IPT1	r_3726	2.74E-05	9.77E-05	0.00E+00
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2	e_1048	IPT1	r_3727	2.74E-05	9.77E-05	0.00E+00
3	e_1048	IPT1	r_3728	2.74E-05	9.77E-05	0.00E+00
4	e_1048	IPT1	r_3729	2.74E-05	9.77E-05	0.00E+00
5	e_1048	IPT1	r_3730	2.74E-05	9.77E-05	0.00E+00
6	e_1048	IPT1	r_3731	2.74E-05	9.77E-05	0.00E+00
7	e_1048	IPT1	r_3732	2.74E-05	9.77E-05	0.00E+00
8	e_1048	IPT1	r_3733	2.74E-05	9.77E-05	0.00E+00
9	e_1048	IPT1	r_3734	2.74E-05	9.77E-05	0.00E+00
10	e_1048	IPT1	r_3735	2.74E-05	9.77E-05	0.00E+00
11	e_1048	IPT1	r_3736	2.74E-05	9.77E-05	0.00E+00
12	e_1048	IPT1	r_3737	2.74E-05	9.77E-05	0.00E+00
13	e_1048	IPT1	r_3738	2.74E-05	9.77E-05	0.00E+00
14	e_1048	IPT1	r_3739	2.74E-05	9.77E-05	0.00E+00
15	e_1048	IPT1	r_3740	2.74E-05	9.77E-05	0.00E+00
16	e_1048	IPT1	r_3741	2.74E-05	9.77E-05	0.00E+00
17	e_1048	IPT1	r_3742	2.74E-05	9.77E-05	0.00E+00
18	e_1048	IPT1	r_3743	5.49E-05	1.95E-04	0.00E+00
19	e_1048	IPT1	r_3744	5.49E-05	1.95E-04	0.00E+00
20	e_1048	IPT1	r_3745	5.49E-05	1.95E-04	0.00E+00
21	e_1048	IPT1	r_3746	5.49E-05	1.95E-04	0.00E+00
22	e_1048	IPT1	r_3747	2.74E-05	9.77E-05	0.00E+00
23	e_1048	IPT1	r_3748	2.74E-05	9.77E-05	0.00E+00
24	e_1048	IPT1	r_3749	2.74E-05	9.77E-05	0.00E+00
25	e_1048	IPT1	r_3750	2.74E-05	9.77E-05	0.00E+00
26	e_1048	IPT1	r_3751	5.49E-05	1.95E-04	0.00E+00
27	e_1048	IPT1	r_3752	5.49E-05	1.95E-04	0.00E+00
28	e_1048	IPT1	r_3753	5.49E-05	1.95E-04	0.00E+00
29	e_1048	IPT1	r_3754	5.49E-05	1.95E-04	0.00E+00
30	e_1048	IPT1	r_3755	8.11E-05	2.88E-04	0.00E+00
31	e_1048	IPT1	r_3756	2.30E-05	8.17E-05	0.00E+00
32	e_1048	IPT1	r_3757	4.05E-05	1.44E-04	0.00E+00
33	e_1048	IPT1	r_3758	1.79E-05	6.36E-05	0.00E+00
34	e_1048	IPT1	r_3759	5.36E-05	1.17E-04	0.00E+00
35	e_1048	IPT1	r_3760	3.69E-05	9.93E-05	0.00E+00
36	e_1048	IPT1	r_3761	4.05E-05	1.03E-04	0.00E+00
37	e_1048	IPT1	r_3762	3.69E-05	9.93E-05	0.00E+00
38	e_1048	IPT1	r_3763	4.05E-05	1.03E-04	0.00E+00
39	e_1048	IPT1	r_3764	3.69E-05	9.93E-05	0.00E+00
40	e_1048	IPT1	r_3765	1.93E-04	5.14E-04	3.66E-05
41	e_1048	IPT1	r_3766	4.35E-05	1.26E-04	0.00E+00
42	e_1048	IPT1	r_3767	8.11E-05	2.88E-04	0.00E+00
43	e_1048	IPT1	r_3768	4.22E-05	1.14E-04	0.00E+00
44	e_1048	IPT1	r_3769	8.11E-05	2.88E-04	0.00E+00
45	e_1048	IPT1	r_3770	4.22E-05	1.14E-04	0.00E+00
46	e_1048	IPT1	r_3771	4.61E-05	1.52E-04	0.00E+00
47	e_1048	IPT1	r_3772	4.22E-05	1.14E-04	0.00E+00
48	e_1048	IPT1	r_3773	1.93E-04	5.14E-04	3.66E-05
49	e_1048	IPT1	r_3774	4.35E-05	1.26E-04	0.00E+00
50	e_1048	IPT1	r_3775	8.11E-05	2.88E-04	0.00E+00
51	e_1048	IPT1	r_3776	4.22E-05	1.14E-04	0.00E+00
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2	e_1048	IPT1	r_3777	8.11E-05	2.88E-04	0.00E+00
3	e_1048	IPT1	r_3778	4.22E-05	1.14E-04	0.00E+00
4	e_1048	IPT1	r_3779	4.61E-05	1.52E-04	0.00E+00
5	e_1048	IPT1	r_3780	4.22E-05	1.14E-04	0.00E+00
6	e_1048	IPT1	r_3781	2.00E+03	2.00E+03	0.00E+00
7	e_1048	IPT1	r_3782	2.00E+03	2.00E+03	0.00E+00
8	e_1048	IPT1	r_3783	2.00E+03	2.00E+03	0.00E+00
9	e_1048	IPT1	r_3784	2.00E+03	2.00E+03	0.00E+00
10	e_1048	IPT1	r_3785	2.00E+03	2.00E+03	0.00E+00
11	e_1048	IPT1	r_3786	2.00E+03	2.00E+03	0.00E+00
12	e_1048	IPT1	r_3787	2.00E+03	2.00E+03	0.00E+00
13	e_1048	IPT1	r_3788	2.00E+03	2.00E+03	0.00E+00
14	e_1048	IPT1	r_3789	1.83E-04	3.16E-04	8.41E-06
15	e_1048	IPT1	r_3790	7.38E-05	1.99E-04	0.00E+00
16	e_1048	IPT1	r_3791	8.50E-05	2.24E-04	0.00E+00
17	e_1048	IPT1	r_3792	7.38E-05	1.99E-04	0.00E+00
18	e_1048	IPT1	r_3793	8.50E-05	2.24E-04	0.00E+00
19	e_1048	IPT1	r_3794	7.38E-05	1.99E-04	0.00E+00
20	e_1048	IPT1	r_3795	7.38E-05	1.99E-04	0.00E+00
21	e_1048	IPT1	r_3796	7.38E-05	1.99E-04	0.00E+00
22	e_1048	IPT1	r_3797	1.07E-04	2.35E-04	0.00E+00
23	e_1048	IPT1	r_3798	7.38E-05	1.99E-04	0.00E+00
24	e_1048	IPT1	r_3799	8.09E-05	2.06E-04	0.00E+00
25	e_1048	IPT1	r_3800	7.38E-05	1.99E-04	0.00E+00
26	e_1048	IPT1	r_3801	8.09E-05	2.06E-04	0.00E+00
27	e_1048	IPT1	r_3802	7.38E-05	1.99E-04	0.00E+00
28	e_1048	IPT1	r_3803	7.38E-05	1.99E-04	0.00E+00
29	e_1049	AUR1	r_3804	7.38E-05	1.99E-04	0.00E+00
30	e_1050	KEI1	r_3805	1.44E-04	3.43E-04	8.41E-06
31	e_1049	AUR1	r_3806	1.22E-04	3.19E-04	0.00E+00
32	e_1050	KEI1	r_3807	1.29E-04	3.34E-04	0.00E+00
33	e_1049	AUR1	r_3808	1.22E-04	3.19E-04	0.00E+00
34	e_1050	KEI1	r_3809	1.29E-04	3.34E-04	0.00E+00
35	e_1049	AUR1	r_3810	1.22E-04	3.19E-04	0.00E+00
36	e_1050	KEI1	r_3811	1.22E-04	3.19E-04	0.00E+00
37	e_1049	AUR1	r_3812	1.22E-04	3.19E-04	0.00E+00
38	e_1050	KEI1	r_3813	1.92E-04	5.12E-04	0.00E+00
39	e_1049	AUR1	r_3814	3.73E-05	1.08E-04	0.00E+00
40	e_1050	KEI1	r_3815	5.70E-05	2.03E-04	0.00E+00
41	e_1049	AUR1	r_3816	3.69E-05	9.93E-05	0.00E+00
42	e_1050	KEI1	r_3817	5.70E-05	2.03E-04	0.00E+00
43	e_1049	AUR1	r_3818	3.69E-05	9.93E-05	0.00E+00
44	e_1050	KEI1	r_3819	3.79E-05	1.25E-04	0.00E+00
45	e_1049	AUR1	r_3820	3.69E-05	9.93E-05	0.00E+00
46	e_1050	KEI1	r_3821	1.92E-04	5.12E-04	0.00E+00
47	e_1049	AUR1	r_3822	3.73E-05	1.08E-04	0.00E+00
48	e_1050	KEI1	r_3823	5.70E-05	2.03E-04	0.00E+00
49	e_1049	AUR1	r_3824	3.69E-05	9.93E-05	0.00E+00
50	e_1050	KEI1	r_3825	5.70E-05	2.03E-04	0.00E+00
51	e_1049	AUR1	r_3826	3.69E-05	9.93E-05	0.00E+00
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2	e_1050	KEI1	r_3827	3.79E-05	1.25E-04	0.00E+00
3	e_1049	AUR1	r_3828	3.69E-05	9.93E-05	0.00E+00
4	e_1050	KEI1	r_3829	0.00E+00	0.00E+00	0.00E+00
5	e_1049	AUR1	r_3830	0.00E+00	0.00E+00	0.00E+00
6	e_1050	KEI1	r_3831	0.00E+00	0.00E+00	0.00E+00
7	e_1049	AUR1	r_3832	0.00E+00	0.00E+00	0.00E+00
8	e_1050	KEI1	r_3833	0.00E+00	0.00E+00	0.00E+00
9	e_1049	AUR1	r_3834	0.00E+00	0.00E+00	0.00E+00
10	e_1050	KEI1	r_3835	0.00E+00	0.00E+00	0.00E+00
11	e_1049	AUR1	r_3836	0.00E+00	0.00E+00	0.00E+00
12	e_1050	KEI1	r_3837	4.80E-05	1.71E-04	0.00E+00
13	e_1049	AUR1	r_3838	4.80E-05	1.71E-04	0.00E+00
14	e_1050	KEI1	r_3839	4.80E-05	1.71E-04	0.00E+00
15	e_1049	AUR1	r_3840	4.80E-05	1.71E-04	0.00E+00
16	e_1050	KEI1	r_3841	4.80E-05	1.71E-04	0.00E+00
17	e_1049	AUR1	r_3842	4.80E-05	1.71E-04	0.00E+00
18	e_1050	KEI1	r_3843	4.80E-05	1.71E-04	0.00E+00
19	e_1049	AUR1	r_3844	4.80E-05	1.71E-04	0.00E+00
20	e_1050	KEI1	r_3845	1.92E-04	5.12E-04	0.00E+00
21	e_1049	AUR1	r_3846	3.73E-05	1.08E-04	0.00E+00
22	e_1050	KEI1	r_3847	5.70E-05	2.03E-04	0.00E+00
23	e_1049	AUR1	r_3848	3.69E-05	9.93E-05	0.00E+00
24	e_1050	KEI1	r_3849	5.70E-05	2.03E-04	0.00E+00
25	e_1049	AUR1	r_3850	3.69E-05	9.93E-05	0.00E+00
26	e_1050	KEI1	r_3851	3.79E-05	1.25E-04	0.00E+00
27	e_1049	AUR1	r_3852	3.69E-05	9.93E-05	0.00E+00
28	e_1050	KEI1	r_3853	1.92E-04	5.12E-04	0.00E+00
29	e_1049	AUR1	r_3854	3.73E-05	1.08E-04	0.00E+00
30	e_1050	KEI1	r_3855	5.70E-05	2.03E-04	0.00E+00
31	e_1049	AUR1	r_3856	3.69E-05	9.93E-05	0.00E+00
32	e_1050	KEI1	r_3857	5.70E-05	2.03E-04	0.00E+00
33	e_1049	AUR1	r_3858	3.69E-05	9.93E-05	0.00E+00
34	e_1050	KEI1	r_3859	3.79E-05	1.25E-04	0.00E+00
35	e_1049	AUR1	r_3860	3.69E-05	9.93E-05	0.00E+00
36	e_1050	KEI1	r_3861	4.80E-05	1.71E-04	0.00E+00
37	e_1049	AUR1	r_3862	4.80E-05	1.71E-04	0.00E+00
38	e_1050	KEI1	r_3863	4.80E-05	1.71E-04	0.00E+00
39	e_1049	AUR1	r_3864	4.80E-05	1.71E-04	0.00E+00
40	e_1050	KEI1	r_3865	4.80E-05	1.71E-04	0.00E+00
41	e_1049	AUR1	r_3866	4.80E-05	1.71E-04	0.00E+00
42	e_1050	KEI1	r_3867	4.80E-05	1.71E-04	0.00E+00
43	e_1049	AUR1	r_3868	4.80E-05	1.71E-04	0.00E+00
44	e_1050	KEI1	r_3869	7.20E-05	2.56E-04	0.00E+00
45	e_1049	AUR1	r_3870	7.20E-05	2.56E-04	0.00E+00
46	e_1050	KEI1	r_3871	7.20E-05	2.56E-04	0.00E+00
47	e_1049	AUR1	r_3872	7.20E-05	2.56E-04	0.00E+00
48	e_1050	KEI1	r_3873	7.20E-05	2.56E-04	0.00E+00
49	e_1049	AUR1	r_3874	7.20E-05	2.56E-04	0.00E+00
50	e_1050	KEI1	r_3875	7.20E-05	2.56E-04	0.00E+00
51	e_1049	AUR1	r_3876	7.20E-05	2.56E-04	0.00E+00
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2	e_1050	KEI1	r_3877	4.22E-05	1.14E-04	0.00E+00
3	e_1049	AUR1	r_3878	4.22E-05	1.14E-04	0.00E+00
4	e_1050	KEI1	r_3879	4.22E-05	1.14E-04	0.00E+00
5	e_1049	AUR1	r_3880	4.22E-05	1.14E-04	0.00E+00
6	e_1050	KEI1	r_3881	4.22E-05	1.14E-04	0.00E+00
7	e_1049	AUR1	r_3882	4.22E-05	1.14E-04	0.00E+00
8	e_1050	KEI1	r_3883	4.22E-05	1.14E-04	0.00E+00
9	e_1049	AUR1	r_3884	4.22E-05	1.14E-04	0.00E+00
10	e_1050	KEI1	r_3885	0.00E+00	0.00E+00	0.00E+00
11	e_1049	AUR1	r_3886	0.00E+00	0.00E+00	0.00E+00
12	e_1050	KEI1	r_3887	0.00E+00	0.00E+00	0.00E+00
13	e_1049	AUR1	r_3888	0.00E+00	0.00E+00	0.00E+00
14	e_1050	KEI1	r_3889	0.00E+00	0.00E+00	0.00E+00
15	e_1049	AUR1	r_3890	0.00E+00	0.00E+00	0.00E+00
16	e_1050	KEI1	r_3891	0.00E+00	0.00E+00	0.00E+00
17	e_1049	AUR1	r_3892	0.00E+00	0.00E+00	0.00E+00
18	e_1050	KEI1	r_3893	0.00E+00	0.00E+00	0.00E+00
19	e_1049	AUR1	r_3894	0.00E+00	0.00E+00	0.00E+00
20	e_1050	KEI1	r_3895	0.00E+00	0.00E+00	0.00E+00
21	e_1049	AUR1	r_3896	0.00E+00	0.00E+00	0.00E+00
22	e_1050	KEI1	r_3897	0.00E+00	0.00E+00	0.00E+00
23	e_1049	AUR1	r_3898	0.00E+00	0.00E+00	0.00E+00
24	e_1050	KEI1	r_3899	0.00E+00	0.00E+00	0.00E+00
25	e_1049	AUR1	r_3900	0.00E+00	0.00E+00	0.00E+00
26	e_1050	KEI1	r_3901	2.00E+03	2.00E+03	0.00E+00
27	e_1049	AUR1	r_3902	2.00E+03	2.00E+03	0.00E+00
28	e_1050	KEI1	r_3903	4.22E-05	1.14E-04	0.00E+00
29	e_1049	AUR1	r_3904	4.22E-05	1.14E-04	0.00E+00
30	e_1050	KEI1	r_3905	4.22E-05	1.14E-04	0.00E+00
31	e_1049	AUR1	r_3906	4.22E-05	1.14E-04	0.00E+00
32	e_1050	KEI1	r_3907	4.22E-05	1.14E-04	0.00E+00
33	e_1049	AUR1	r_3908	4.22E-05	1.14E-04	0.00E+00
34	e_1050	KEI1	r_3909	4.22E-05	1.14E-04	0.00E+00
35	e_1049	AUR1	r_3910	4.22E-05	1.14E-04	0.00E+00
36	e_1050	KEI1	r_3911	9.61E-05	3.42E-04	0.00E+00
37	e_1049	AUR1	r_3912	9.61E-05	3.42E-04	0.00E+00
38	e_1050	KEI1	r_3913	9.61E-05	3.42E-04	0.00E+00
39	e_1049	AUR1	r_3914	9.61E-05	3.42E-04	0.00E+00
40	e_1050	KEI1	r_3915	9.61E-05	3.42E-04	0.00E+00
41	e_1049	AUR1	r_3916	9.61E-05	3.42E-04	0.00E+00
42	e_1050	KEI1	r_3917	9.61E-05	3.42E-04	0.00E+00
43	e_1049	AUR1	r_3918	9.61E-05	3.42E-04	0.00E+00
44	e_1050	KEI1	r_3919	4.80E-05	1.71E-04	0.00E+00
45	e_1049	AUR1	r_3920	4.80E-05	1.71E-04	0.00E+00
46	e_1050	KEI1	r_3921	4.80E-05	1.71E-04	0.00E+00
47	e_1049	AUR1	r_3922	4.80E-05	1.71E-04	0.00E+00
48	e_1050	KEI1	r_3923	4.80E-05	1.71E-04	0.00E+00
49	e_1049	AUR1	r_3924	4.80E-05	1.71E-04	0.00E+00
50	e_1050	KEI1	r_3925	4.80E-05	1.71E-04	0.00E+00
51	e_1049	AUR1	r_3926	4.80E-05	1.71E-04	0.00E+00
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2	e_1050	KEI1	r_3927	2.74E-05	9.77E-05	0.00E+00
3	e_1049	AUR1	r_3928	2.74E-05	9.77E-05	0.00E+00
4	e_1050	KEI1	r_3929	2.40E-05	8.54E-05	0.00E+00
5	e_1049	AUR1	r_3930	2.40E-05	8.54E-05	0.00E+00
6	e_1050	KEI1	r_3931	2.40E-05	8.54E-05	0.00E+00
7	e_1049	AUR1	r_3932	2.40E-05	8.54E-05	0.00E+00
8	e_1050	KEI1	r_3933	2.40E-05	8.54E-05	0.00E+00
9	e_1049	AUR1	r_3934	2.40E-05	8.54E-05	0.00E+00
10	e_1050	KEI1	r_3935	2.40E-05	8.54E-05	0.00E+00
11	e_1049	AUR1	r_3936	2.40E-05	8.54E-05	0.00E+00
12	e_1050	KEI1	r_3937	2.79E-05	9.93E-05	2.92E-06
13	e_1049	AUR1	r_3938	5.00E-05	1.38E-04	0.00E+00
14	e_1050	KEI1	r_3939	2.00E+03	2.00E+03	0.00E+00
15	e_1049	AUR1	r_3940	4.80E-05	1.71E-04	0.00E+00
16	e_1050	KEI1	r_3941	4.80E-05	1.71E-04	0.00E+00
17	e_1049	AUR1	r_3942	4.80E-05	1.71E-04	0.00E+00
18	e_1050	KEI1	r_3943	4.80E-05	1.71E-04	0.00E+00
19	e_1049	AUR1	r_3944	4.80E-05	1.71E-04	0.00E+00
20	e_1050	KEI1	r_3945	4.80E-05	1.71E-04	0.00E+00
21	e_1049	AUR1	r_3946	4.80E-05	1.71E-04	0.00E+00
22	e_1050	KEI1	r_3947	4.80E-05	1.71E-04	0.00E+00
23	e_1049	AUR1	r_3948	4.80E-05	1.71E-04	0.00E+00
24	e_1050	KEI1	r_3949	2.40E-05	8.54E-05	0.00E+00
25	e_1049	AUR1	r_3950	2.40E-05	8.54E-05	0.00E+00
26	e_1050	KEI1	r_3951	2.40E-05	8.54E-05	0.00E+00
27	e_1049	AUR1	r_3952	2.40E-05	8.54E-05	0.00E+00
28	e_1050	KEI1	r_3953	2.40E-05	8.54E-05	0.00E+00
29	e_1049	AUR1	r_3954	2.40E-05	8.54E-05	0.00E+00
30	e_1050	KEI1	r_3955	2.40E-05	8.54E-05	0.00E+00
31	e_1049	AUR1	r_3956	2.40E-05	8.54E-05	0.00E+00
32	e_1050	KEI1	r_3957	1.93E-04	5.68E-04	3.66E-05
33	e_1049	AUR1	r_3958	0.00E+00	0.00E+00	0.00E+00
34	e_1050	KEI1	r_3959	5.36E-05	1.17E-04	0.00E+00
35	e_1049	AUR1	r_3960	5.36E-05	1.17E-04	0.00E+00
36	e_1050	KEI1	r_3961	5.36E-05	1.17E-04	0.00E+00
37	e_0023	ACH1	r_3962	5.36E-05	1.17E-04	0.00E+00
38	e_0482	SUC2	r_3973	1.20E-10	5.62E-10	5.50E-06
39	e_0227	URH1	r_3987	5.78E-11	2.70E-10	2.64E-06
40			r_3996	5.20E-10	1.99E-09	1.95E-05
41			r_4005	1.03E-10	4.82E-10	4.72E-06
42			r_4038	1.16E-10	5.40E-10	5.29E-06
43			r_4040	0.00E+00	0.00E+00	6.78E-09
44			r_4043	0.00E+00	0.00E+00	0.00E+00
45			r_4044	0.00E+00	0.00E+00	0.00E+00
46			r_4041	1.81E-07	6.92E-07	6.78E-03
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3	diff between > Y7.Fe diff within	diff between > Y7.6 diff within	diff between > diff within
4	No	No	No
5	No	No	No
6	No	No	No
7	No	No	No
8	Yes	Yes	Yes
9	Yes	Yes	Yes
10	Yes	Yes	Yes
11	No	No	No
12	No	No	No
13	Yes	Yes	Yes
14	Yes	Yes	Yes
15	Yes	Yes	Yes
16	Yes	Yes	Yes
17	No	No	No
18	Yes	Yes	Yes
19	No	No	No
20	Yes	Yes	Yes
21	No	No	No
22	No	No	No
23	Yes	Yes	Yes
24	No	No	No
25	Yes	Yes	Yes
26	No	No	No
27	Yes	Yes	Yes
28	No	No	No
29	No	No	No
30	No	No	No
31	Yes	Yes	Yes
32	Yes	Yes	Yes
33	No	No	No
34	No	No	No
35	No	No	No
36	No	No	No
37	No	No	No
38	No	No	No
39	Yes	Yes	Yes
40	Yes	Yes	Yes
41	Yes	Yes	Yes
42	Yes	No	No
43	No	No	No
44	No	No	No
45	No	No	No
46	No	No	No
47	Yes	Yes	Yes
48	No	No	No
49	Yes	Yes	Yes
50	No	No	No
51	Yes	Yes	Yes
52	Yes	Yes	Yes
53	No	No	No
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2	Yes	Yes	Yes
3	No	No	No
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16	Yes	Yes	Yes
17	Yes	Yes	Yes
18	Yes	Yes	Yes
19	No	No	No
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28	No	No	No
29	Yes	Yes	Yes
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For Peer Review

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For Peer Review

Non-zero fluxes with difference between models > variability within

Rxn ID	Y7.Fe	Y7.6	at least one flux nonzero	diff between > diff within
r_0045	0.015124	0		1 Yes
r_0058	0.015124	0		1 Yes
r_0079	0.023833	0.00938		1 Yes
r_0151	0.023833	0.00938		1 Yes
r_0152	0.025321	0.010982		1 Yes
r_0153	0.025321	0.010982		1 Yes
r_0202	0.017622	0.002691		1 Yes
r_0203	0.017622	0.002691		1 Yes
r_0452	0.063292	0.03559		1 Yes
r_0476	0.13268	0.077745		1 Yes
r_0499	0.023833	0.00938		1 Yes
r_0566	0.017622	0.002691		1 Yes
r_0570	0.029666	0.015662		1 Yes
r_0671	0.015124	0		1 Yes
r_0694	0.015124	0		1 Yes
r_0762	0.015124	0		1 Yes
r_0768	0.015124	0		1 Yes
r_0771	0.015124	0		1 Yes
r_0785	0.015124	0		1 Yes
r_0786	0.015124	0		1 Yes
r_0855	0.023833	0.00938		1 Yes
r_0908	0.023833	0.00938		1 Yes
r_0911	0.023833	0.00938		1 Yes
r_0912	0.029666	0.015662		1 Yes
r_0913	0.017622	0.002691		1 Yes
r_0914	0.023833	0.00938		1 Yes
r_0915	0.023833	0.00938		1 Yes
r_0916	0.072143	0.028834		1 Yes
r_0982	0.070811	0.035404		1 Yes
r_0984	-0.04104	-0.0119		1 Yes
r_1049	-0.00133	0.006571		1 Yes
r_1050	-0.03971	-0.01847		1 Yes
r_1055	0.017622	0.002691		1 Yes
r_2114	0.015124	0		1 Yes
r_0020	0.038377	0.025044		1 Yes
r_0039	0.038377	0.025044		1 Yes
r_0040	0.038377	0.025044		1 Yes
r_0065	0.038377	0.025044		1 Yes
r_0279	0.038377	0.025044		1 Yes
r_0996	0.038377	0.025044		1 Yes
r_0997	0.038377	0.025044		1 Yes
r_1127	-0.03838	-0.02504		1 Yes
r_1244	0.11521	0.075217		1 Yes
r_1567	-0.03838	-0.02504		1 Yes
r_1708	0.038377	0.025044		1 Yes
r_2005	-0.11521	-0.07522		1 Yes
r_0091	0.029945	0.02369		1 Yes
r_0466	0.029945	0.02369		1 Yes

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2		r_0889	0.029945	0.02369	1 Yes
3		r_1194	0.067006	0.055879	1 Yes
4		r_0005	0.09984	0.10753	1 Yes
5		r_0006	0.09984	0.10753	1 Yes
6		r_0007	0.005833	0.006282	1 Yes
7		r_0014	8.71E-05	9.38E-05	1 Yes
8		r_0015	8.71E-05	9.38E-05	1 Yes
9		r_0016	0.016954	0.01826	1 Yes
10		r_0018	0.02518	0.027119	1 Yes
11		r_0023	-0.02608	-0.02809	1 Yes
12		r_0025	0.026077	0.028086	1 Yes
13		r_0027	0.02518	0.027119	1 Yes
14		r_0030	0.026077	0.028086	1 Yes
15		r_0032	0.005041	0.00543	1 Yes
16		r_0038	0.000174	0.000188	1 Yes
17		r_0060	-0.02608	-0.02809	1 Yes
18		r_0061	0.026077	0.028086	1 Yes
19		r_0080	0.006194	0.006672	1 Yes
20		r_0081	7.04E-07	7.58E-07	1 Yes
21		r_0096	0.049357	0.053159	1 Yes
22		r_0097	0.049357	0.053159	1 Yes
23		r_0104	0.003616	0.003895	1 Yes
24		r_0109	0.01403	0.01511	1 Yes
25		r_0112	0.021043	0.022664	1 Yes
26		r_0115	0.028629	0.030834	1 Yes
27		r_0118	0.028629	0.030834	1 Yes
28		r_0144	0.001734	0.001867	1 Yes
29		r_0148	0.513162	0.471244	1 Yes
30		r_0154	0.005041	0.00543	1 Yes
31		r_0157	0.040365	0.043474	1 Yes
32		r_0173	0.016002	0.017235	1 Yes
33		r_0195	0.002059	0.002217	1 Yes
34		r_0207	0.014138	0.015227	1 Yes
35		r_0208	0.014138	0.015227	1 Yes
36		r_0209	0.014138	0.015227	1 Yes
37		r_0211	0.008948	0.009637	1 Yes
38		r_0212	0.008948	0.009637	1 Yes
39		r_0214	0.009731	0.01048	1 Yes
40		r_0215	0.038254	0.0412	1 Yes
41		r_0219	0.038254	0.0412	1 Yes
42		r_0220	0.026174	0.02819	1 Yes
43		r_0225	0.005833	0.006282	1 Yes
44		r_0226	6.071165	6.146186	1 Yes
45		r_0231	0.0006	0.000646	1 Yes
46		r_0234	0.000595	0.000641	1 Yes
47		r_0235	0.000595	0.000641	1 Yes
48		r_0236	0.000595	0.000641	1 Yes
49		r_0237	0.000595	0.000641	1 Yes
50		r_0238	0.000595	0.000641	1 Yes
51		r_0239	0.000595	0.000641	1 Yes
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r_0240	0.000595	0.000641	1 Yes
r_0241	0.000595	0.000641	1 Yes
r_0244	0.000564	0.000608	1 Yes
r_0250	0.023869	0.025707	1 Yes
r_0272	8.8E-08	9.48E-08	1 Yes
r_0278	0.020755	0.022353	1 Yes
r_0300	0.089635	0.096539	1 Yes
r_0304	8.8E-08	9.48E-08	1 Yes
r_0307	0.00446	0.004803	1 Yes
r_0313	0.000581	0.000625	1 Yes
r_0317	0.0006	0.000646	1 Yes
r_0344	0.000317	0.000341	1 Yes
r_0349	-0.00973	-0.01048	1 Yes
r_0352	0.049357	0.053159	1 Yes
r_0353	0.016954	0.01826	1 Yes
r_0355	0.001205	0.001298	1 Yes
r_0361	0.071079	0.076554	1 Yes
r_0362	0.071079	0.076554	1 Yes
r_0366	0.540524	0.582157	1 Yes
r_0436	8.8E-08	9.48E-08	1 Yes
r_0438	1.909946	1.936979	1 Yes
r_0439	3.819891	3.873958	1 Yes
r_0445	1.142322	1.166824	1 Yes
r_0446	-1.12634	-1.1659	1 Yes
r_0453	0.009731	0.01048	1 Yes
r_0462	0.001205	0.001298	1 Yes
r_0467	0.720357	0.70738	1 Yes
r_0478	0.009273	0.009987	1 Yes
r_0479	0.026552	0.028598	1 Yes
r_0486	1.193469	1.221075	1 Yes
r_0502	1.186348	1.197951	1 Yes
r_0503	-0.56848	-0.58053	1 Yes
r_0510	0.045618	0.049131	1 Yes
r_0512	0.025549	0.027517	1 Yes
r_0514	0.004345	0.00468	1 Yes
r_0525	8.71E-05	9.38E-05	1 Yes
r_0530	8.8E-08	9.48E-08	1 Yes
r_0531	8.8E-08	9.48E-08	1 Yes
r_0536	0.005833	0.006282	1 Yes
r_0537	0.005833	0.006282	1 Yes
r_0538	0.005833	0.006282	1 Yes
r_0539	0.005833	0.006282	1 Yes
r_0542	0.02518	0.027119	1 Yes
r_0545	0.02518	0.027119	1 Yes
r_0546	0.038254	0.0412	1 Yes
r_0548	0.033213	0.035771	1 Yes
r_0557	8.8E-08	9.48E-08	1 Yes
r_0558	0.003616	0.003895	1 Yes
r_0560	0.003616	0.003895	1 Yes
r_0563	0.005833	0.006282	1 Yes

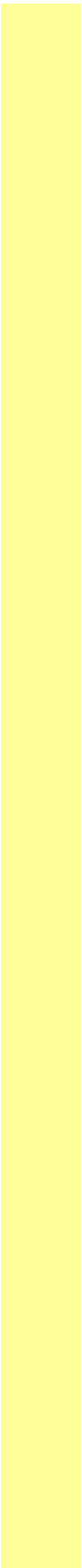
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3	r_0565	0.004345	0.00468	1 Yes
4	r_0569	0.830825	0.813375	1 Yes
5	r_0665	0.016954	0.01826	1 Yes
6	r_0667	0.001205	0.001298	1 Yes
7	r_0669	0.016954	0.01826	1 Yes
8	r_0678	0.02518	0.027119	1 Yes
9	r_0698	0.000603	0.000649	1 Yes
10	r_0701	0.026077	0.028086	1 Yes
11	r_0711	0.02518	0.027119	1 Yes
12	r_0722	0.071117	0.076595	1 Yes
13	r_0723	-0.07112	-0.07659	1 Yes
14	r_0725	1.179836	1.190938	1 Yes
15	r_0726	0.001734	0.001867	1 Yes
16	r_0727	0.006194	0.006672	1 Yes
17	r_0729	0.004461	0.004804	1 Yes
18	r_0732	1.179836	1.190938	1 Yes
19	r_0736	0.003616	0.003895	1 Yes
20	r_0739	0.003616	0.003895	1 Yes
21	r_0758	0.000283	0.000305	1 Yes
22	r_0759	0.028629	0.030834	1 Yes
23	r_0760	8.8E-08	9.48E-08	1 Yes
24	r_0800	0.096525	0.087671	1 Yes
25	r_0811	0.251817	0.271213	1 Yes
26	r_0813	0.005041	0.00543	1 Yes
27	r_0816	0.014138	0.015227	1 Yes
28	r_0818	0.028629	0.030834	1 Yes
29	r_0819	0.01449	0.015606	1 Yes
30	r_0820	-0.00973	-0.01048	1 Yes
31	r_0821	0.009731	0.01048	1 Yes
32	r_0852	0.011781	0.012688	1 Yes
33	r_0882	8.8E-08	9.48E-08	1 Yes
34	r_0883	0.005041	0.00543	1 Yes
35	r_0888	0.247356	0.266408	1 Yes
36	r_0891	0.652945	0.638917	1 Yes
37	r_0892	1.193469	1.221075	1 Yes
38	r_0893	0.540524	0.582157	1 Yes
39	r_0902	-0.07112	-0.07659	1 Yes
40	r_0904	0.003616	0.003895	1 Yes
41	r_0909	0.005833	0.006282	1 Yes
42	r_0910	0.005833	0.006282	1 Yes
43	r_0917	0.652945	0.638917	1 Yes
44	r_0918	0.652945	0.638917	1 Yes
45	r_0935	3.52E-07	3.79E-07	1 Yes
46	r_0938	0.011781	0.012688	1 Yes
47	r_0939	0.008974	0.009665	1 Yes
48	r_0941	0.01449	0.015606	1 Yes
49	r_0942	4.4E-08	4.74E-08	1 Yes
50	r_0957	0.01449	0.015606	1 Yes
51	r_0958	0.172741	0.186046	1 Yes
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2	r_0959	0.016002	0.017235	1 Yes
3	r_0961	0.151741	0.163428	1 Yes
4	r_0962	0.463771	0.532069	1 Yes
5	r_0967	0.000174	0.000188	1 Yes
6	r_0968	8.71E-05	9.38E-05	1 Yes
7	r_0988	0.02518	0.027119	1 Yes
8	r_0989	0.02518	0.027119	1 Yes
9	r_0995	0.016312	0.017568	1 Yes
10	r_1011	0.000603	0.000649	1 Yes
11	r_1012	0.000603	0.000649	1 Yes
12	r_1026	0.005041	0.00543	1 Yes
13	r_1027	0.005041	0.00543	1 Yes
14	r_1038	0.006097	0.006567	1 Yes
15	r_1041	0.033213	0.035771	1 Yes
16	r_1042	0.016839	0.018136	1 Yes
17	r_1045	0.000317	0.000341	1 Yes
18	r_1051	0.002059	0.002217	1 Yes
19	r_1054	0.607356	0.617974	1 Yes
20	r_1057	0.002499	0.002691	1 Yes
21	r_1066	0.008974	0.009665	1 Yes
22	r_1069	8.8E-08	9.48E-08	1 Yes
23	r_1072	0.004461	0.004804	1 Yes
24	r_1081	8.8E-08	9.48E-08	1 Yes
25	r_1083	8.8E-08	9.48E-08	1 Yes
26	r_1089	0.02328	0.025073	1 Yes
27	r_1838	0.02518	0.027119	1 Yes
28	r_2131	0.094939	0.102252	1 Yes
29	r_1099	0.02518	0.027119	1 Yes
30	r_1110	6.042536	6.115352	1 Yes
31	r_1115	0.597736	0.529755	1 Yes
32	r_1129	0.003616	0.003895	1 Yes
33	r_1179	0	9.48E-08	1 Yes
34	r_1237	0.028629	0.030834	1 Yes
35	r_1245	4.342508	4.463558	1 Yes
36	r_1266	0.006801	0.007325	1 Yes
37	r_1277	-3.72208	-3.53034	1 Yes
38	r_1543	0.09984	0.10753	1 Yes
39	r_1574	-0.02608	-0.02809	1 Yes
40	r_1595	0.026077	0.028086	1 Yes
41	r_1622	-7E-07	-7.6E-07	1 Yes
42	r_1654	-0.59774	-0.52975	1 Yes
43	r_1696	-0.93273	-0.97283	1 Yes
44	r_1697	1.963804	1.994986	1 Yes
45	r_1701	3.67E-05	3.95E-05	1 Yes
46	r_1729	-0.00032	-0.00034	1 Yes
47	r_1748	-0.07108	-0.07655	1 Yes
48	r_1754	0.000564	0.000608	1 Yes
49	r_1766	8.8E-08	9.48E-08	1 Yes
50	r_1811	1.136965	1.161054	1 Yes
51	r_1825	-0.06984	-0.07522	1 Yes
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2		r_1840	-0.00362 -0.00389	1 Yes
3		r_1887	0.01449 0.015606	1 Yes
4		r_1932	-0.07108 -0.07655	1 Yes
5		r_1963	-0.0012 -0.0013	1 Yes
6		r_1964	0.001205 0.001297	1 Yes
7		r_1978	1.909946 1.936979	1 Yes
8		r_1979	1.962779 1.945015	1 Yes
9		r_1992	-1.96278 -1.94502	1 Yes
10		r_2022	8.8E-08 9.48E-08	1 Yes
11		r_2030	8.71E-05 9.38E-05	1 Yes
12		r_2032	0.830825 0.813375	1 Yes
13		r_2045	-0.56848 -0.58053	1 Yes
14		r_2053	0.000603 0.000649	1 Yes
15		r_2054	0.000603 0.000649	1 Yes
16		r_2060	-0.0068 -0.00732	1 Yes
17		r_2096	-8.37517 -8.51698	1 Yes
18		r_2108	0.08798 0.094757	1 Yes
19		r_2111	0.08798 0.094757	1 Yes
20		r_3545	0.000527 0.000567	1 Yes
21		r_3547	0.00114 0.001228	1 Yes
22		r_3548	-0.00114 -0.00123	1 Yes
23		r_3973	7.14E-05 7.69E-05	1 Yes
24		r_3987	3.43E-05 3.7E-05	1 Yes
25		r_3996	0.000253 0.000273	1 Yes
26		r_4005	6.13E-05 6.6E-05	1 Yes
27		r_4038	6.87E-05 7.4E-05	1 Yes
28		r_4040	8.8E-08 9.48E-08	1 Yes
29		r_4041	0.08798 0.094757	1 Yes
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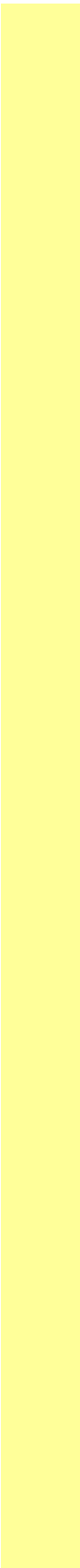
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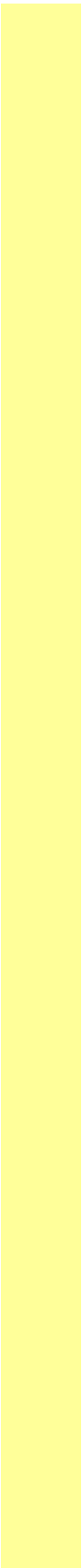
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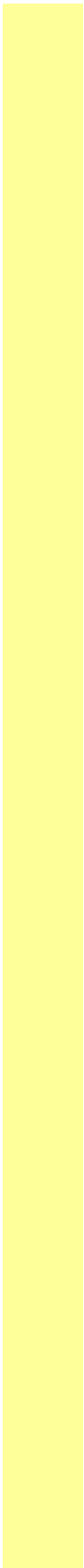
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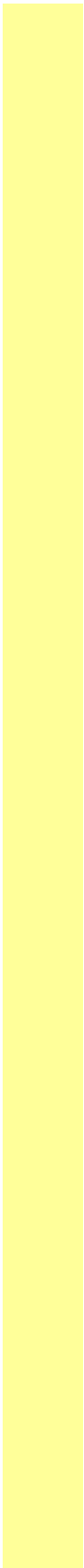
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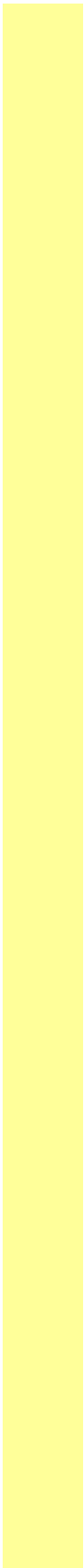
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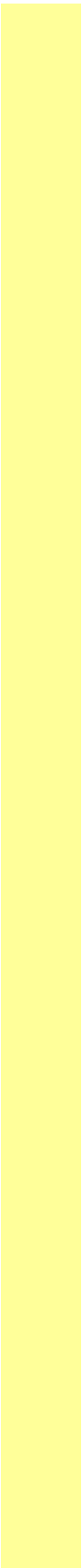
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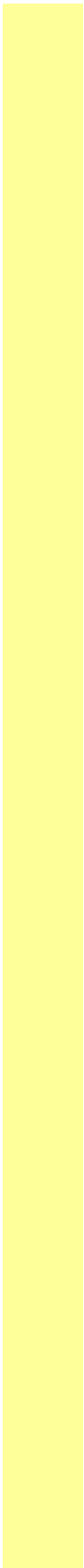
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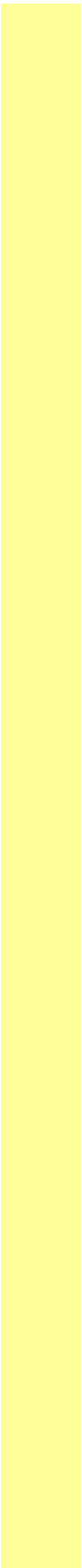
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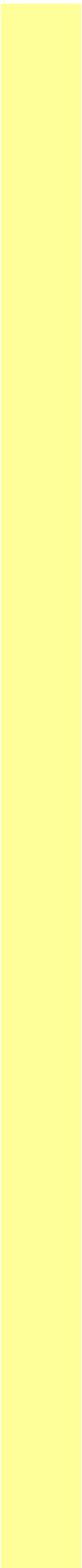


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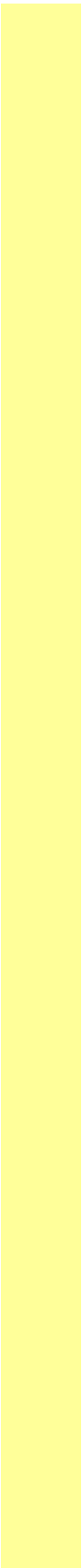
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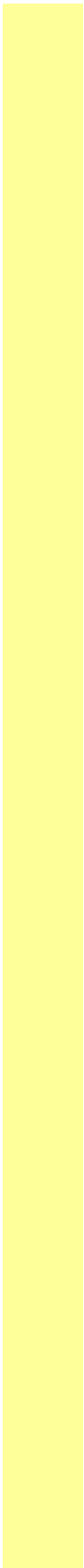
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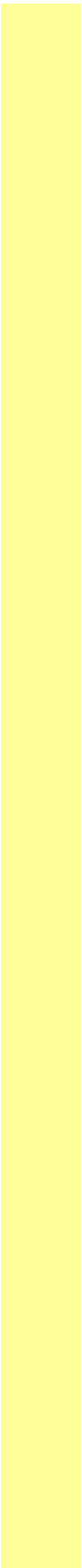
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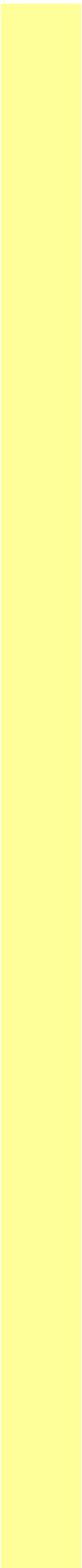
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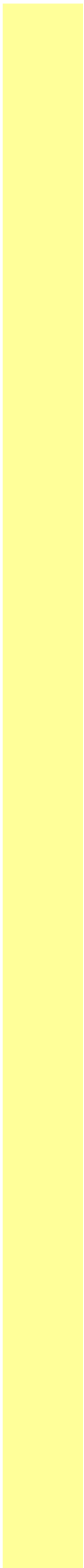
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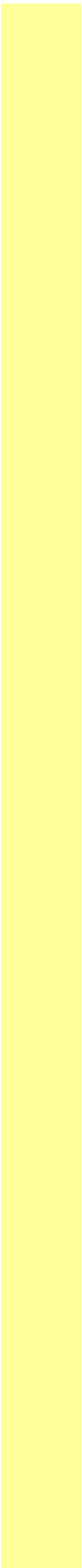
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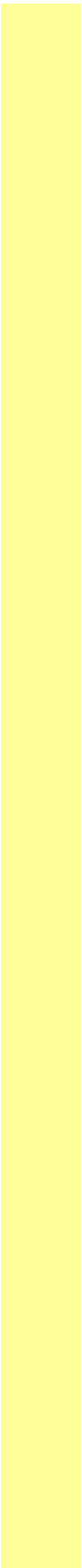
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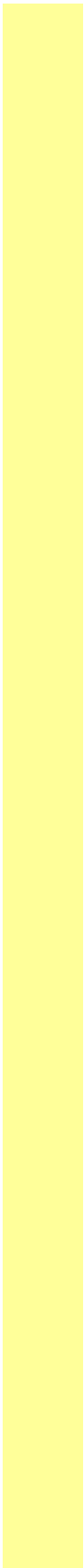
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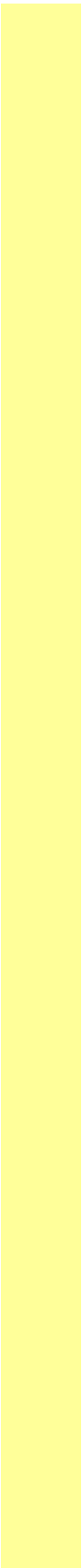
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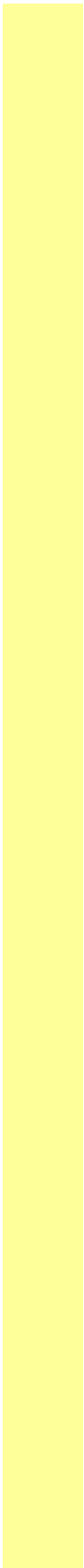
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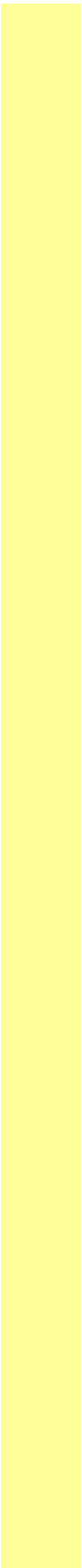
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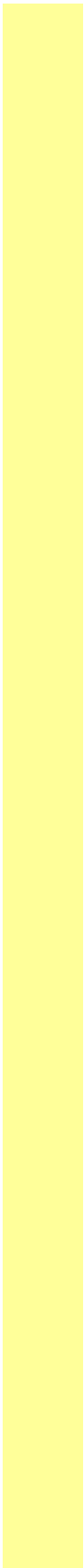
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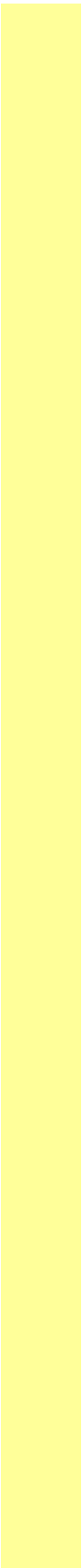
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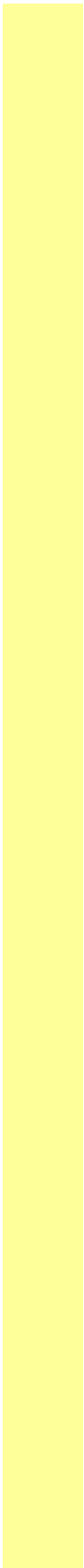
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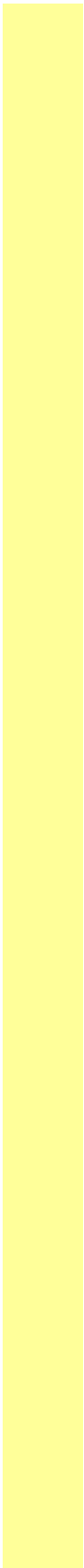
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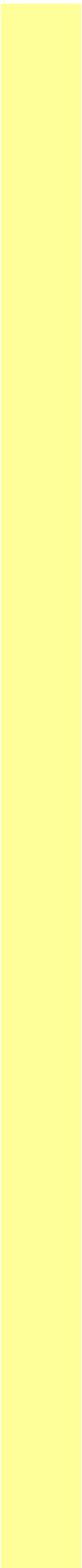
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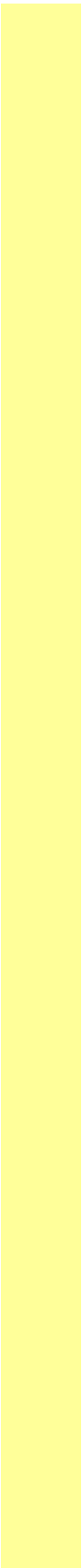
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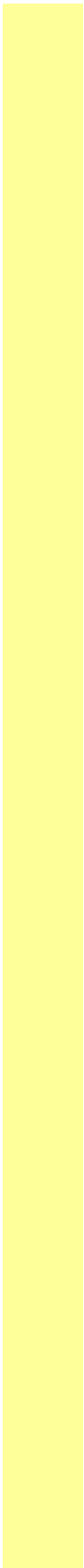
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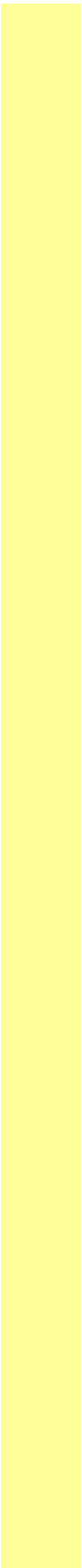
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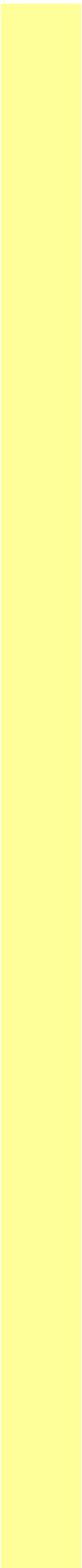
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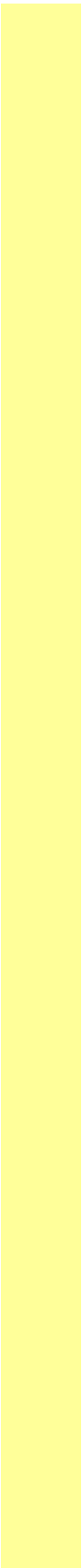
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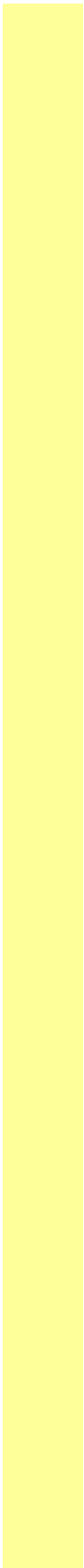
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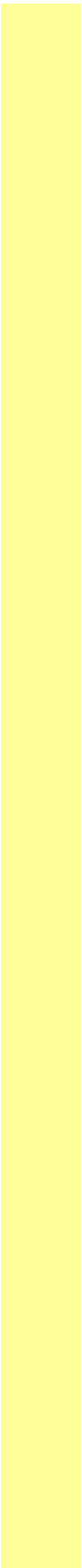
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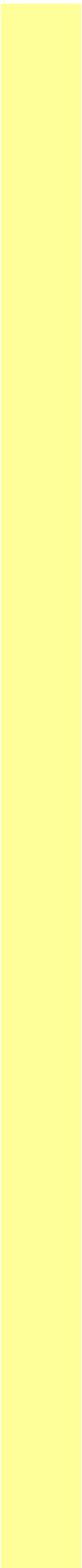
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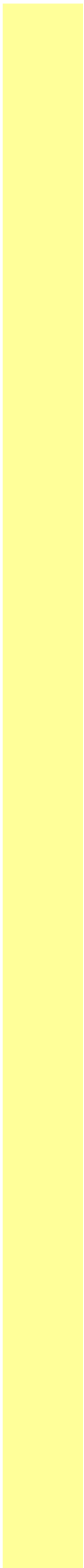
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ance	>25% difference				
	SUMMARY				
r_0020	ARO3				ADE1 r_0020
r_0039	ARO1				ADE12 r_0039
r_0040	ARO1				ADE13 r_0040
r_0045	BNA5				ADE16 r_0045
r_0058	BNA1				ADE17 r_0058
r_0065	ARO1				ADE2 r_0065
r_0079	ADE6				ADE4 r_0079
r_0151	ADE13				ADE5,7 r_0151
r_0152	ADE13				ADE6 r_0152
r_0153	ADE12				ADE8 r_0153
r_0202	TRP4				ARO1 r_0202
r_0203	TRP2	TRP3			ARO2 r_0203
r_0279	ARO2				ARO3 r_0279
r_0452	FUM1				BNA1 r_0452
r_0476	GLN1				BNA2 r_0476
r_0499	ADE8				BNA4 r_0499
r_0566	TRP3				BNA5 r_0566
r_0570	ADE16	ADE17			BNA6 r_0570
r_0671	BNA4				BNA7 r_0671
r_0694	BNA2				CTP1 r_0694
r_0762	BNA7				FUM1 r_0762
r_0768	QNS1				GLN1 r_0768
r_0771	YEF1	UTR1			NMA1 r_0771
r_0785	NMA1				PHO84 r_0785
r_0786	BNA6				PHO87 r_0786
r_0855	ADE5,7				PHO89 r_0855
r_0908	ADE1				PHO90 r_0908
r_0911	ADE2				PHO91 r_0911
r_0912	ADE16	ADE17			PRS1 r_0912
r_0913	TRP1				PRS2 r_0913
r_0914	ADE5,7				PRS3 r_0914
r_0915	ADE4				PRS4 r_0915
r_0916	PRS4	PRS2	PRS3	PRS1	PRS5 r_0916
r_0982	RKI1				QNS1 r_0982
r_0984	RPE1				RKI1 r_0984
r_0996	ARO1				RPE1 r_0996
r_0997	ARO1				TKL1 r_0997
r_1049	TKL2	TKL1			TKL2 r_1049
r_1050	TKL2	TKL1			TRP1 r_1050
r_1055	TRP5				TRP2 r_1055
r_1127	CTP1				TRP3 r_1127
r_1244	PHO89	PHO87	PHO90	PHO84	PHO91 r_1244
					TRP5
					UTR1
					YEF1

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	>20% difference									
	SUMMARY									
4	ARO3						ADE1	r_0020	ARO3	
5	ARO1						ADE12	r_0039	ARO1	
6	ARO1						ADE13	r_0040	ARO1	
7	BNA5						ADE16	r_0045	BNA5	
8	BNA1						ADE17	r_0058	BNA1	
9	ARO1						ADE2	r_0065	ARO1	
10	ADE6						ADE4	r_0079	ADE6	
11	ADE13						ADE5,7	r_0091	SOL4	SOL3
12	ADE13						ADE6	r_0151	ADE13	
13	ADE12						ADE8	r_0152	ADE13	
14	TRP4						ARO1	r_0153	ADE12	
15	TRP2	TRP3					ARO2	r_0202	TRP4	
16	ARO2						ARO3	r_0203	TRP2	TRP3
17	FUM1						BNA1	r_0279	ARO2	
18	GLN1						BNA2	r_0452	FUM1	
19	ADE8						BNA4	r_0466	ZWF1	
20	TRP3						BNA5	r_0476	GLN1	
21	ADE16	ADE17					BNA6	r_0499	ADE8	
22	BNA4						BNA7	r_0566	TRP3	
23	BNA2						CTP1	r_0570	ADE16	ADE17
24	BNA7						FUM1	r_0671	BNA4	
25	QNS1						GLN1	r_0694	BNA2	
26	YEF1	UTR1					GND1	r_0762	BNA7	
27	NMA1						GND2	r_0768	QNS1	
28	BNA6						NMA1	r_0771	YEF1	UTR1
29	ADE5,7						PHO84	r_0785	NMA1	
30	ADE1						PHO87	r_0786	BNA6	
31	ADE2						PHO89	r_0855	ADE5,7	
32	ADE16	ADE17					PHO90	r_0889	GND2	GND1
33	TRP1						PHO91	r_0908	ADE1	
34	ADE5,7						PRS1	r_0911	ADE2	
35	ADE4						PRS2	r_0912	ADE16	ADE17
36	PRS4	PRS2	PRS3	PRS1	PRS5		PRS3	r_0913	TRP1	
37	RKI1						PRS4	r_0914	ADE5,7	
38	RPE1						PRS5	r_0915	ADE4	
39	ARO1						QNS1	r_0916	PRS4	PRS2 PRS3
40	ARO1						RKI1	r_0982	RKI1	
41	TKL2	TKL1					RPE1	r_0984	RPE1	
42	TKL2	TKL1					SOL3	r_0996	ARO1	
43	TRP5						SOL4	r_0997	ARO1	
44	CTP1						TKL1	r_1049	TKL2	TKL1
45	PHO89	PHO87	PHO90	PHO84	PHO91		TKL2	r_1050	TKL2	TKL1
46							TRP1	r_1055	TRP5	
47							TRP2	r_1127	CTP1	
48							TRP3	r_1244	PHO89	PHO87 PHO90
49							TRP4			
50							TRP5			
51							UTR1			

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2				>15% difference					
3				SUMMARY					
4				ADE1	r_0020	ARO3			
5				ADE12	r_0039	ARO1			
6				ADE13	r_0040	ARO1			
7				ADE16	r_0045	BNA5			
8				ADE17	r_0058	BNA1			
9				ADE2	r_0065	ARO1			
10				ADE4	r_0079	ADE6			
11				ADE5,7	r_0091	SOL4	SOL3		
12				ADE6	r_0151	ADE13			
13				ADE8	r_0152	ADE13			
14				AGC1	r_0153	ADE12			
15				ARO1	r_0202	TRP4			
16				ARO2	r_0203	TRP2	TRP3		
17				ARO3	r_0279	ARO2			
18				BNA1	r_0452	FUM1			
19				BNA2	r_0466	ZWF1			
20				BNA4	r_0476	GLN1			
21				BNA5	r_0499	ADE8			
22				BNA6	r_0566	TRP3			
23				BNA7	r_0570	ADE16	ADE17		
24				CTP1	r_0671	BNA4			
25				FUM1	r_0694	BNA2			
26				GLN1	r_0762	BNA7			
27				GND1	r_0768	QNS1			
28				GND2	r_0771	YEF1	UTR1		
29				NMA1	r_0785	NMA1			
30				PHO84	r_0786	BNA6			
31				PHO87	r_0855	ADE5,7			
32				PHO89	r_0889	GND2	GND1		
33				PHO90	r_0908	ADE1			
34				PHO91	r_0911	ADE2			
35				PRS1	r_0912	ADE16	ADE17		
36				PRS2	r_0913	TRP1			
37				PRS3	r_0914	ADE5,7			
38				PRS4	r_0915	ADE4			
39				PRS5	r_0916	PRS4	PRS2	PRS3	PRS1
40	PRS1	PRS5		QNS1	r_0982	RKI1			PRS5
41				RKI1	r_0984	RPE1			
42				RPE1	r_0996	ARO1			
43				SOL3	r_0997	ARO1			
44				SOL4	r_1049	TKL2	TKL1		
45				TKL1	r_1050	TKL2	TKL1		
46				TKL2	r_1055	TRP5			
47				TRP1	r_1127	CTP1			
48				TRP2	r_1194	AGC1			
49	PHO84	PHO91		TRP3	r_1244	PHO89	PHO87	PHO90	PHO84
50				TRP4					PHO91
51				TRP5					
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2	For all GO Term Analyses:	
3	Date	Fri Aug 10 07:56:53 EDT 20
4	Aspect	P
5	P-value cutoff	0.01
6	Calculate FDR	Yes
7	Regulation links followed	Yes
8	Bonferroni correction	Yes
9	Annotation file	gene_association.sgd
10	Evidence codes excluded	IEA (50713)
11	Evidence codes used	IEP (118), IGI (5648), IBA (1
12		IPI (3222), ND (3715), IC (1.
13		HMP (80), IDA (16679), IMI
14		ISM (1260), NAS (101), ISO
15		ISA (303)
16		
17		

18	Gene Ontology term	Cluster frequency
19		
20	>15% difference	
21	small molecule metabolic process	48 of 51 genes, 94.1%
22	nucleotide metabolic process	34 of 51 genes, 66.7%
23	nucleoside phosphate metabolic process	34 of 51 genes, 66.7%
24	nucleobase-containing small molecule metabolic process	34 of 51 genes, 66.7%
25	nucleotide biosynthetic process	25 of 51 genes, 49.0%
26	organophosphate metabolic process	34 of 51 genes, 66.7%
27	nucleoside phosphate biosynthetic process	25 of 51 genes, 49.0%
28	phosphorus metabolic process	38 of 51 genes, 74.5%
29	nicotinamide nucleotide metabolic process	19 of 51 genes, 37.3%
30	pyridine nucleotide metabolic process	19 of 51 genes, 37.3%
31	ribose phosphate metabolic process	23 of 51 genes, 45.1%
32	pyridine-containing compound metabolic process	19 of 51 genes, 37.3%
33	organophosphate biosynthetic process	25 of 51 genes, 49.0%
34	oxidoreduction coenzyme metabolic process	19 of 51 genes, 37.3%
35	phosphate-containing compound metabolic process	34 of 51 genes, 66.7%
36	NADP metabolic process	11 of 51 genes, 21.6%
37	tryptophan metabolic process	10 of 51 genes, 19.6%
38	indolalkylamine metabolic process	10 of 51 genes, 19.6%
39	indole-containing compound metabolic process	10 of 51 genes, 19.6%
40	IMP metabolic process	9 of 51 genes, 17.6%
41	coenzyme metabolic process	19 of 51 genes, 37.3%
42	aromatic amino acid family metabolic process	12 of 51 genes, 23.5%
43	'de novo' IMP biosynthetic process	8 of 51 genes, 15.7%
44	purine nucleotide biosynthetic process	15 of 51 genes, 29.4%
45	pentose-phosphate shunt	9 of 51 genes, 17.6%
46	glyceraldehyde-3-phosphate metabolic process	9 of 51 genes, 17.6%
47	carbohydrate derivative metabolic process	23 of 51 genes, 45.1%
48	aromatic compound biosynthetic process	33 of 51 genes, 64.7%
49	purine-containing compound biosynthetic process	15 of 51 genes, 29.4%
50	IMP biosynthetic process	8 of 51 genes, 15.7%
51	cellular biogenic amine metabolic process	10 of 51 genes, 19.6%
52	glucose 6-phosphate metabolic process	9 of 51 genes, 17.6%
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2	organic cyclic compound biosynthetic process	33 of 51 genes, 64.7%
3	ribose phosphate biosynthetic process	14 of 51 genes, 27.5%
4	cofactor metabolic process	19 of 51 genes, 37.3%
5	cellular aromatic compound metabolic process	41 of 51 genes, 80.4%
6	heterocycle biosynthetic process	31 of 51 genes, 60.8%
7	NAD biosynthetic process	8 of 51 genes, 15.7%
8	organonitrogen compound biosynthetic process	34 of 51 genes, 66.7%
9	organic cyclic compound metabolic process	41 of 51 genes, 80.4%
10	purine nucleotide metabolic process	15 of 51 genes, 29.4%
11	cellular amine metabolic process	10 of 51 genes, 19.6%
12	amine metabolic process	10 of 51 genes, 19.6%
13	organonitrogen compound metabolic process	42 of 51 genes, 82.4%
14	pyridine-containing compound biosynthetic process	11 of 51 genes, 21.6%
15	purine-containing compound metabolic process	15 of 51 genes, 29.4%
16	nicotinamide nucleotide biosynthetic process	10 of 51 genes, 19.6%
17	pyridine nucleotide biosynthetic process	10 of 51 genes, 19.6%
18	heterocycle metabolic process	39 of 51 genes, 76.5%
19	'de novo' NAD biosynthetic process	6 of 51 genes, 11.8%
20	oxoacid metabolic process	20 of 51 genes, 39.2%
21	organic acid metabolic process	20 of 51 genes, 39.2%
22	NAD metabolic process	8 of 51 genes, 15.7%
23	5-phosphoribose 1-diphosphate biosynthetic process	5 of 51 genes, 9.8%
24	'de novo' NAD biosynthetic process from tryptophan	5 of 51 genes, 9.8%
25	5-phosphoribose 1-diphosphate metabolic process	5 of 51 genes, 9.8%
26	cellular metabolic process	49 of 51 genes, 96.1%
27	cellular aldehyde metabolic process	9 of 51 genes, 17.6%
28	metabolic process	49 of 51 genes, 96.1%
29	tryptophan biosynthetic process	5 of 51 genes, 9.8%
30	indole-containing compound biosynthetic process	5 of 51 genes, 9.8%
31	indolalkylamine biosynthetic process	5 of 51 genes, 9.8%
32	aromatic amino acid family biosynthetic process	7 of 51 genes, 13.7%
33	organic substance metabolic process	48 of 51 genes, 94.1%
34	nucleobase-containing compound biosynthetic process	25 of 51 genes, 49.0%
35	pentose-phosphate shunt, oxidative branch	5 of 51 genes, 9.8%
36	purine nucleoside monophosphate biosynthetic process	9 of 51 genes, 17.6%
37	purine ribonucleoside monophosphate biosynthetic process	9 of 51 genes, 17.6%
38	cellular amino acid metabolic process	14 of 51 genes, 27.5%
39	ribonucleoside monophosphate biosynthetic process	9 of 51 genes, 17.6%
40	carbohydrate derivative biosynthetic process	14 of 51 genes, 27.5%
41	alpha-amino acid metabolic process	12 of 51 genes, 23.5%
42	nucleoside monophosphate biosynthetic process	9 of 51 genes, 17.6%
43	cellular nitrogen compound metabolic process	40 of 51 genes, 78.4%
44	nucleobase-containing compound metabolic process	34 of 51 genes, 66.7%
45	cofactor biosynthetic process	11 of 51 genes, 21.6%
46	amine biosynthetic process	5 of 51 genes, 9.8%
47	cellular biogenic amine biosynthetic process	5 of 51 genes, 9.8%
48	purine ribonucleotide biosynthetic process	9 of 51 genes, 17.6%
49	ribonucleotide biosynthetic process	9 of 51 genes, 17.6%
50	cellular nitrogen compound biosynthetic process	32 of 51 genes, 62.7%
51	carboxylic acid metabolic process	16 of 51 genes, 31.4%
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2	coenzyme biosynthetic process	10 of 51 genes, 19.6%
3	cellular biosynthetic process	36 of 51 genes, 70.6%
4	phosphate ion transport	5 of 51 genes, 9.8%
5	biosynthetic process	36 of 51 genes, 70.6%
6	dicarboxylic acid metabolic process	7 of 51 genes, 13.7%
7	purine nucleoside monophosphate metabolic process	9 of 51 genes, 17.6%
8	purine ribonucleoside monophosphate metabolic process	9 of 51 genes, 17.6%
9	ribonucleoside monophosphate metabolic process	9 of 51 genes, 17.6%
10	organic substance biosynthetic process	35 of 51 genes, 68.6%
11	nitrogen compound metabolic process	43 of 51 genes, 84.3%
12	nucleoside monophosphate metabolic process	9 of 51 genes, 17.6%
13	phosphate ion transmembrane transport	4 of 51 genes, 7.8%
14	anion transmembrane transport	7 of 51 genes, 13.7%
15	kynurenine metabolic process	3 of 51 genes, 5.9%
16	primary metabolic process	43 of 51 genes, 84.3%
17	purine ribonucleotide metabolic process	9 of 51 genes, 17.6%
18	ribonucleotide metabolic process	9 of 51 genes, 17.6%
19	cellular amino acid biosynthetic process	8 of 51 genes, 15.7%
20	chorismate biosynthetic process	3 of 51 genes, 5.9%
21	chorismate metabolic process	3 of 51 genes, 5.9%
22	regulation of inorganic anion transmembrane transport	3 of 51 genes, 5.9%
23	regulation of anion transmembrane transport	3 of 51 genes, 5.9%
24	regulation of phosphate transmembrane transport	3 of 51 genes, 5.9%
25	inorganic anion transport	5 of 51 genes, 9.8%
26	polyphosphate metabolic process	4 of 51 genes, 7.8%
27	cellular process	49 of 51 genes, 96.1%
28	regulation of phosphate transport	3 of 51 genes, 5.9%
29	regulation of ion transmembrane transport	3 of 51 genes, 5.9%
30	inorganic anion transmembrane transport	4 of 51 genes, 7.8%
31	organic acid biosynthetic process	9 of 51 genes, 17.6%
32	carboxylic acid biosynthetic process	9 of 51 genes, 17.6%
33	benzene-containing compound metabolic process	3 of 51 genes, 5.9%
34	ion transmembrane transport	7 of 51 genes, 13.7%
35	regulation of transmembrane transport	3 of 51 genes, 5.9%

>20% difference

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41	small molecule metabolic process	48 of 50 genes, 96.0%
42	nucleotide metabolic process	34 of 50 genes, 68.0%
43	nucleoside phosphate metabolic process	34 of 50 genes, 68.0%
44	nucleobase-containing small molecule metabolic process	34 of 50 genes, 68.0%
45	nucleotide biosynthetic process	25 of 50 genes, 50.0%
46	organophosphate metabolic process	34 of 50 genes, 68.0%
47	nucleoside phosphate biosynthetic process	25 of 50 genes, 50.0%
48	phosphorus metabolic process	38 of 50 genes, 76.0%
49	nicotinamide nucleotide metabolic process	19 of 50 genes, 38.0%
50	ribose phosphate metabolic process	23 of 50 genes, 46.0%
51	pyridine nucleotide metabolic process	19 of 50 genes, 38.0%
52	pyridine-containing compound metabolic process	19 of 50 genes, 38.0%
53	organophosphate biosynthetic process	25 of 50 genes, 50.0%
54	oxidoreduction coenzyme metabolic process	19 of 50 genes, 38.0%
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phosphate-containing compound metabolic process	34 of 50 genes, 68.0%
NADP metabolic process	11 of 50 genes, 22.0%
tryptophan metabolic process	10 of 50 genes, 20.0%
indolalkylamine metabolic process	10 of 50 genes, 20.0%
indole-containing compound metabolic process	10 of 50 genes, 20.0%
coenzyme metabolic process	19 of 50 genes, 38.0%
IMP metabolic process	9 of 50 genes, 18.0%
aromatic amino acid family metabolic process	12 of 50 genes, 24.0%
'de novo' IMP biosynthetic process	8 of 50 genes, 16.0%
purine nucleotide biosynthetic process	15 of 50 genes, 30.0%
carbohydrate derivative metabolic process	23 of 50 genes, 46.0%
pentose-phosphate shunt	9 of 50 genes, 18.0%
glyceraldehyde-3-phosphate metabolic process	9 of 50 genes, 18.0%
aromatic compound biosynthetic process	33 of 50 genes, 66.0%
purine-containing compound biosynthetic process	15 of 50 genes, 30.0%
organic cyclic compound biosynthetic process	33 of 50 genes, 66.0%
IMP biosynthetic process	8 of 50 genes, 16.0%
cellular biogenic amine metabolic process	10 of 50 genes, 20.0%
glucose 6-phosphate metabolic process	9 of 50 genes, 18.0%
ribose phosphate biosynthetic process	14 of 50 genes, 28.0%
cofactor metabolic process	19 of 50 genes, 38.0%
cellular aromatic compound metabolic process	41 of 50 genes, 82.0%
heterocycle biosynthetic process	31 of 50 genes, 62.0%
organic cyclic compound metabolic process	41 of 50 genes, 82.0%
organonitrogen compound biosynthetic process	34 of 50 genes, 68.0%
NAD biosynthetic process	8 of 50 genes, 16.0%
organonitrogen compound metabolic process	42 of 50 genes, 84.0%
purine nucleotide metabolic process	15 of 50 genes, 30.0%
cellular amine metabolic process	10 of 50 genes, 20.0%
amine metabolic process	10 of 50 genes, 20.0%
pyridine-containing compound biosynthetic process	11 of 50 genes, 22.0%
purine-containing compound metabolic process	15 of 50 genes, 30.0%
heterocycle metabolic process	39 of 50 genes, 78.0%
nicotinamide nucleotide biosynthetic process	10 of 50 genes, 20.0%
pyridine nucleotide biosynthetic process	10 of 50 genes, 20.0%
'de novo' NAD biosynthetic process	6 of 50 genes, 12.0%
oxoacid metabolic process	20 of 50 genes, 40.0%
organic acid metabolic process	20 of 50 genes, 40.0%
NAD metabolic process	8 of 50 genes, 16.0%
5-phosphoribose 1-diphosphate biosynthetic process	5 of 50 genes, 10.0%
'de novo' NAD biosynthetic process from tryptophan	5 of 50 genes, 10.0%
5-phosphoribose 1-diphosphate metabolic process	5 of 50 genes, 10.0%
organic substance metabolic process	48 of 50 genes, 96.0%
cellular aldehyde metabolic process	9 of 50 genes, 18.0%
cellular metabolic process	48 of 50 genes, 96.0%
tryptophan biosynthetic process	5 of 50 genes, 10.0%
indole-containing compound biosynthetic process	5 of 50 genes, 10.0%
indolalkylamine biosynthetic process	5 of 50 genes, 10.0%
aromatic amino acid family biosynthetic process	7 of 50 genes, 14.0%
metabolic process	48 of 50 genes, 96.0%

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2	nucleobase-containing compound biosynthetic process	25 of 50 genes, 50.0%
3	pentose-phosphate shunt, oxidative branch	5 of 50 genes, 10.0%
4	cellular amino acid metabolic process	14 of 50 genes, 28.0%
5	purine nucleoside monophosphate biosynthetic process	9 of 50 genes, 18.0%
6	purine ribonucleoside monophosphate biosynthetic process	9 of 50 genes, 18.0%
7	carbohydrate derivative biosynthetic process	14 of 50 genes, 28.0%
8	ribonucleoside monophosphate biosynthetic process	9 of 50 genes, 18.0%
9	alpha-amino acid metabolic process	12 of 50 genes, 24.0%
10	nucleoside monophosphate biosynthetic process	9 of 50 genes, 18.0%
11	nucleobase-containing compound metabolic process	34 of 50 genes, 68.0%
12	cofactor biosynthetic process	11 of 50 genes, 22.0%
13	purine ribonucleotide biosynthetic process	9 of 50 genes, 18.0%
14	amine biosynthetic process	5 of 50 genes, 10.0%
15	cellular biogenic amine biosynthetic process	5 of 50 genes, 10.0%
16	cellular nitrogen compound metabolic process	39 of 50 genes, 78.0%
17	carboxylic acid metabolic process	16 of 50 genes, 32.0%
18	ribonucleotide biosynthetic process	9 of 50 genes, 18.0%
19	coenzyme biosynthetic process	10 of 50 genes, 20.0%
20	phosphate ion transport	5 of 50 genes, 10.0%
21	cellular nitrogen compound biosynthetic process	31 of 50 genes, 62.0%
22	dicarboxylic acid metabolic process	7 of 50 genes, 14.0%
23	cellular biosynthetic process	35 of 50 genes, 70.0%
24	organic substance biosynthetic process	35 of 50 genes, 70.0%
25	biosynthetic process	35 of 50 genes, 70.0%
26	purine nucleoside monophosphate metabolic process	9 of 50 genes, 18.0%
27	purine ribonucleoside monophosphate metabolic process	9 of 50 genes, 18.0%
28	ribonucleoside monophosphate metabolic process	9 of 50 genes, 18.0%
29	nucleoside monophosphate metabolic process	9 of 50 genes, 18.0%
30	primary metabolic process	43 of 50 genes, 86.0%
31	phosphate ion transmembrane transport	4 of 50 genes, 8.0%
32	nitrogen compound metabolic process	42 of 50 genes, 84.0%
33	kynurenine metabolic process	3 of 50 genes, 6.0%
34	purine ribonucleotide metabolic process	9 of 50 genes, 18.0%
35	ribonucleotide metabolic process	9 of 50 genes, 18.0%
36	cellular amino acid biosynthetic process	8 of 50 genes, 16.0%
37	chorismate biosynthetic process	3 of 50 genes, 6.0%
38	chorismate metabolic process	3 of 50 genes, 6.0%
39	regulation of inorganic anion transmembrane transport	3 of 50 genes, 6.0%
40	regulation of anion transmembrane transport	3 of 50 genes, 6.0%
41	regulation of phosphate transmembrane transport	3 of 50 genes, 6.0%
42	inorganic anion transport	5 of 50 genes, 10.0%
43	polyphosphate metabolic process	4 of 50 genes, 8.0%
44	regulation of phosphate transport	3 of 50 genes, 6.0%
45	regulation of ion transmembrane transport	3 of 50 genes, 6.0%
46	inorganic anion transmembrane transport	4 of 50 genes, 8.0%
47	anion transmembrane transport	6 of 50 genes, 12.0%
48	cellular process	48 of 50 genes, 96.0%
49	organic acid biosynthetic process	9 of 50 genes, 18.0%
50	carboxylic acid biosynthetic process	9 of 50 genes, 18.0%
51	benzene-containing compound metabolic process	3 of 50 genes, 6.0%
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1	regulation of transmembrane transport	3 of 50 genes, 6.0%
2	tryptophan catabolic process to kynurenine	2 of 50 genes, 4.0%
3	'de novo' AMP biosynthetic process	2 of 50 genes, 4.0%
4	quinolinate metabolic process	2 of 50 genes, 4.0%
5	regulation of anion transport	3 of 50 genes, 6.0%
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8	>30% difference & >25% difference	
9	small molecule metabolic process	43 of 45 genes, 95.6%
10	nucleotide metabolic process	29 of 45 genes, 64.4%
11	nucleoside phosphate metabolic process	29 of 45 genes, 64.4%
12	nucleotide biosynthetic process	25 of 45 genes, 55.6%
13	nucleoside phosphate biosynthetic process	25 of 45 genes, 55.6%
14	nucleobase-containing small molecule metabolic process	29 of 45 genes, 64.4%
15	organophosphate metabolic process	29 of 45 genes, 64.4%
16	organophosphate biosynthetic process	25 of 45 genes, 55.6%
17	phosphorus metabolic process	33 of 45 genes, 73.3%
18	aromatic compound biosynthetic process	33 of 45 genes, 73.3%
19	phosphate-containing compound metabolic process	29 of 45 genes, 64.4%
20	tryptophan metabolic process	10 of 45 genes, 22.2%
21	indolalkylamine metabolic process	10 of 45 genes, 22.2%
22	indole-containing compound metabolic process	10 of 45 genes, 22.2%
23	IMP metabolic process	9 of 45 genes, 20.0%
24	aromatic amino acid family metabolic process	12 of 45 genes, 26.7%
25	organic cyclic compound biosynthetic process	33 of 45 genes, 73.3%
26	ribose phosphate metabolic process	18 of 45 genes, 40.0%
27	'de novo' IMP biosynthetic process	8 of 45 genes, 17.8%
28	purine nucleotide biosynthetic process	15 of 45 genes, 33.3%
29	purine-containing compound biosynthetic process	15 of 45 genes, 33.3%
30	nicotinamide nucleotide metabolic process	14 of 45 genes, 31.1%
31	pyridine nucleotide metabolic process	14 of 45 genes, 31.1%
32	organonitrogen compound biosynthetic process	34 of 45 genes, 75.6%
33	heterocycle biosynthetic process	31 of 45 genes, 68.9%
34	IMP biosynthetic process	8 of 45 genes, 17.8%
35	cellular biogenic amine metabolic process	10 of 45 genes, 22.2%
36	ribose phosphate biosynthetic process	14 of 45 genes, 31.1%
37	pyridine-containing compound metabolic process	14 of 45 genes, 31.1%
38	oxidoreduction coenzyme metabolic process	14 of 45 genes, 31.1%
39	NAD biosynthetic process	8 of 45 genes, 17.8%
40	purine nucleotide metabolic process	15 of 45 genes, 33.3%
41	cellular amine metabolic process	10 of 45 genes, 22.2%
42	amine metabolic process	10 of 45 genes, 22.2%
43	purine-containing compound metabolic process	15 of 45 genes, 33.3%
44	pyridine-containing compound biosynthetic process	11 of 45 genes, 24.4%
45	oxoacid metabolic process	20 of 45 genes, 44.4%
46	organic acid metabolic process	20 of 45 genes, 44.4%
47	nicotinamide nucleotide biosynthetic process	10 of 45 genes, 22.2%
48	pyridine nucleotide biosynthetic process	10 of 45 genes, 22.2%
49	'de novo' NAD biosynthetic process	6 of 45 genes, 13.3%
50	cellular aromatic compound metabolic process	36 of 45 genes, 80.0%
51	carbohydrate derivative metabolic process	18 of 45 genes, 40.0%
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2	organic cyclic compound metabolic process	36 of 45 genes, 80.0%
3	coenzyme metabolic process	14 of 45 genes, 31.1%
4	NAD metabolic process	8 of 45 genes, 17.8%
5	organonitrogen compound metabolic process	37 of 45 genes, 82.2%
6	nucleobase-containing compound biosynthetic process	25 of 45 genes, 55.6%
7	5-phosphoribose 1-diphosphate biosynthetic process	5 of 45 genes, 11.1%
8	'de novo' NAD biosynthetic process from tryptophan	5 of 45 genes, 11.1%
9	5-phosphoribose 1-diphosphate metabolic process	5 of 45 genes, 11.1%
10	heterocycle metabolic process	34 of 45 genes, 75.6%
11	aromatic amino acid family biosynthetic process	7 of 45 genes, 15.6%
12	tryptophan biosynthetic process	5 of 45 genes, 11.1%
13	indole-containing compound biosynthetic process	5 of 45 genes, 11.1%
14	indolalkylamine biosynthetic process	5 of 45 genes, 11.1%
15	cellular amino acid metabolic process	14 of 45 genes, 31.1%
16	carbohydrate derivative biosynthetic process	14 of 45 genes, 31.1%
17	cofactor metabolic process	14 of 45 genes, 31.1%
18	purine nucleoside monophosphate biosynthetic process	9 of 45 genes, 20.0%
19	purine ribonucleoside monophosphate biosynthetic process	9 of 45 genes, 20.0%
20	alpha-amino acid metabolic process	12 of 45 genes, 26.7%
21	ribonucleoside monophosphate biosynthetic process	9 of 45 genes, 20.0%
22	cellular biosynthetic process	35 of 45 genes, 77.8%
23	organic substance biosynthetic process	35 of 45 genes, 77.8%
24	organic substance metabolic process	43 of 45 genes, 95.6%
25	biosynthetic process	35 of 45 genes, 77.8%
26	nucleoside monophosphate biosynthetic process	9 of 45 genes, 20.0%
27	cellular nitrogen compound biosynthetic process	31 of 45 genes, 68.9%
28	cellular metabolic process	43 of 45 genes, 95.6%
29	cofactor biosynthetic process	11 of 45 genes, 24.4%
30	carboxylic acid metabolic process	16 of 45 genes, 35.6%
31	purine ribonucleotide biosynthetic process	9 of 45 genes, 20.0%
32	metabolic process	43 of 45 genes, 95.6%
33	ribonucleotide biosynthetic process	9 of 45 genes, 20.0%
34	amine biosynthetic process	5 of 45 genes, 11.1%
35	cellular biogenic amine biosynthetic process	5 of 45 genes, 11.1%
36	coenzyme biosynthetic process	10 of 45 genes, 22.2%
37	NADP metabolic process	6 of 45 genes, 13.3%
38	phosphate ion transport	5 of 45 genes, 11.1%
39	dicarboxylic acid metabolic process	7 of 45 genes, 15.6%
40	purine nucleoside monophosphate metabolic process	9 of 45 genes, 20.0%
41	purine ribonucleoside monophosphate metabolic process	9 of 45 genes, 20.0%
42	ribonucleoside monophosphate metabolic process	9 of 45 genes, 20.0%
43	nucleoside monophosphate metabolic process	9 of 45 genes, 20.0%
44	phosphate ion transmembrane transport	4 of 45 genes, 8.9%
45	nucleobase-containing compound metabolic process	29 of 45 genes, 64.4%
46	cellular nitrogen compound metabolic process	34 of 45 genes, 75.6%
47	purine ribonucleotide metabolic process	9 of 45 genes, 20.0%
48	ribonucleotide metabolic process	9 of 45 genes, 20.0%
49	kynurenine metabolic process	3 of 45 genes, 6.7%
50	cellular amino acid biosynthetic process	8 of 45 genes, 17.8%
51	inorganic anion transport	5 of 45 genes, 11.1%
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2	chorismate biosynthetic process	3 of 45 genes, 6.7%
3	chorismate metabolic process	3 of 45 genes, 6.7%
4	regulation of inorganic anion transmembrane transport	3 of 45 genes, 6.7%
5	regulation of anion transmembrane transport	3 of 45 genes, 6.7%
6	regulation of phosphate transmembrane transport	3 of 45 genes, 6.7%
7	pentose-phosphate shunt	4 of 45 genes, 8.9%
8	glyceraldehyde-3-phosphate metabolic process	4 of 45 genes, 8.9%
9	polyphosphate metabolic process	4 of 45 genes, 8.9%
10	primary metabolic process	38 of 45 genes, 84.4%
11	anion transmembrane transport	6 of 45 genes, 13.3%
12	regulation of phosphate transport	3 of 45 genes, 6.7%
13	regulation of ion transmembrane transport	3 of 45 genes, 6.7%
14	glucose 6-phosphate metabolic process	4 of 45 genes, 8.9%
15	inorganic anion transmembrane transport	4 of 45 genes, 8.9%
16	nitrogen compound metabolic process	37 of 45 genes, 82.2%
17	organic acid biosynthetic process	9 of 45 genes, 20.0%
18	carboxylic acid biosynthetic process	9 of 45 genes, 20.0%
19	benzene-containing compound metabolic process	3 of 45 genes, 6.7%
20	regulation of transmembrane transport	3 of 45 genes, 6.7%
21	cellular process	43 of 45 genes, 95.6%
22	regulation of anion transport	3 of 45 genes, 6.7%
23	alpha-amino acid biosynthetic process	6 of 45 genes, 13.3%
24	tryptophan catabolic process to kynurenine	2 of 45 genes, 4.4%
25	'de novo' AMP biosynthetic process	2 of 45 genes, 4.4%
26	quinolinate metabolic process	2 of 45 genes, 4.4%
27	small molecule biosynthetic process	10 of 45 genes, 22.2%
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31	>35% difference	
32	nucleotide metabolic process	29 of 36 genes, 80.6%
33	nucleoside phosphate metabolic process	29 of 36 genes, 80.6%
34	nucleotide biosynthetic process	25 of 36 genes, 69.4%
35	nucleoside phosphate biosynthetic process	25 of 36 genes, 69.4%
36	nucleobase-containing small molecule metabolic process	29 of 36 genes, 80.6%
37	small molecule metabolic process	36 of 36 genes, 100.0%
38	organophosphate metabolic process	29 of 36 genes, 80.6%
39	organophosphate biosynthetic process	25 of 36 genes, 69.4%
40	phosphate-containing compound metabolic process	29 of 36 genes, 80.6%
41	phosphorus metabolic process	29 of 36 genes, 80.6%
42	aromatic compound biosynthetic process	31 of 36 genes, 86.1%
43	heterocycle biosynthetic process	31 of 36 genes, 86.1%
44	organic cyclic compound biosynthetic process	31 of 36 genes, 86.1%
45	ribose phosphate metabolic process	18 of 36 genes, 50.0%
46	tryptophan metabolic process	10 of 36 genes, 27.8%
47	indolalkylamine metabolic process	10 of 36 genes, 27.8%
48	indole-containing compound metabolic process	10 of 36 genes, 27.8%
49	purine nucleotide biosynthetic process	15 of 36 genes, 41.7%
50	organonitrogen compound biosynthetic process	32 of 36 genes, 88.9%
51	IMP metabolic process	9 of 36 genes, 25.0%
52	purine-containing compound biosynthetic process	15 of 36 genes, 41.7%
53	'de novo' IMP biosynthetic process	8 of 36 genes, 22.2%
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2	nicotinamide nucleotide metabolic process	14 of 36 genes, 38.9%
3	pyridine nucleotide metabolic process	14 of 36 genes, 38.9%
4	ribose phosphate biosynthetic process	14 of 36 genes, 38.9%
5	pyridine-containing compound metabolic process	14 of 36 genes, 38.9%
6	cellular biogenic amine metabolic process	10 of 36 genes, 27.8%
7	oxidoreduction coenzyme metabolic process	14 of 36 genes, 38.9%
8	IMP biosynthetic process	8 of 36 genes, 22.2%
9	cellular aromatic compound metabolic process	34 of 36 genes, 94.4%
10	heterocycle metabolic process	34 of 36 genes, 94.4%
11	organonitrogen compound metabolic process	35 of 36 genes, 97.2%
12	organic cyclic compound metabolic process	34 of 36 genes, 94.4%
13	purine nucleotide metabolic process	15 of 36 genes, 41.7%
14	aromatic amino acid family metabolic process	10 of 36 genes, 27.8%
15	purine-containing compound metabolic process	15 of 36 genes, 41.7%
16	NAD biosynthetic process	8 of 36 genes, 22.2%
17	cellular amine metabolic process	10 of 36 genes, 27.8%
18	amine metabolic process	10 of 36 genes, 27.8%
19	pyridine-containing compound biosynthetic process	11 of 36 genes, 30.6%
20	nucleobase-containing compound biosynthetic process	25 of 36 genes, 69.4%
21	carbohydrate derivative metabolic process	18 of 36 genes, 50.0%
22	nicotinamide nucleotide biosynthetic process	10 of 36 genes, 27.8%
23	cellular nitrogen compound biosynthetic process	31 of 36 genes, 86.1%
24	pyridine nucleotide biosynthetic process	10 of 36 genes, 27.8%
25	coenzyme metabolic process	14 of 36 genes, 38.9%
26	'de novo' NAD biosynthetic process	6 of 36 genes, 16.7%
27	NAD metabolic process	8 of 36 genes, 22.2%
28	cellular nitrogen compound metabolic process	34 of 36 genes, 94.4%
29	cellular biosynthetic process	32 of 36 genes, 88.9%
30	organic substance biosynthetic process	32 of 36 genes, 88.9%
31	biosynthetic process	32 of 36 genes, 88.9%
32	5-phosphoribose 1-diphosphate biosynthetic process	5 of 36 genes, 13.9%
33	'de novo' NAD biosynthetic process from tryptophan	5 of 36 genes, 13.9%
34	5-phosphoribose 1-diphosphate metabolic process	5 of 36 genes, 13.9%
35	carbohydrate derivative biosynthetic process	14 of 36 genes, 38.9%
36	cofactor metabolic process	14 of 36 genes, 38.9%
37	alpha-amino acid metabolic process	12 of 36 genes, 33.3%
38	purine nucleoside monophosphate biosynthetic process	9 of 36 genes, 25.0%
39	purine ribonucleoside monophosphate biosynthetic process	9 of 36 genes, 25.0%
40	tryptophan biosynthetic process	5 of 36 genes, 13.9%
41	indole-containing compound biosynthetic process	5 of 36 genes, 13.9%
42	indolalkylamine biosynthetic process	5 of 36 genes, 13.9%
43	nucleobase-containing compound metabolic process	29 of 36 genes, 80.6%
44	primary metabolic process	36 of 36 genes, 100.0%
45	ribonucleoside monophosphate biosynthetic process	9 of 36 genes, 25.0%
46	nucleoside monophosphate biosynthetic process	9 of 36 genes, 25.0%
47	cofactor biosynthetic process	11 of 36 genes, 30.6%
48	organic substance metabolic process	36 of 36 genes, 100.0%
49	purine ribonucleotide biosynthetic process	9 of 36 genes, 25.0%
50	nitrogen compound metabolic process	35 of 36 genes, 97.2%
51	cellular metabolic process	36 of 36 genes, 100.0%
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coenzyme biosynthetic process	10 of 36 genes, 27.8%
ribonucleotide biosynthetic process	9 of 36 genes, 25.0%
metabolic process	36 of 36 genes, 100.0%
NADP metabolic process	6 of 36 genes, 16.7%
amine biosynthetic process	5 of 36 genes, 13.9%
cellular biogenic amine biosynthetic process	5 of 36 genes, 13.9%
cellular amino acid metabolic process	12 of 36 genes, 33.3%
purine nucleoside monophosphate metabolic process	9 of 36 genes, 25.0%
purine ribonucleoside monophosphate metabolic process	9 of 36 genes, 25.0%
ribonucleoside monophosphate metabolic process	9 of 36 genes, 25.0%
nucleoside monophosphate metabolic process	9 of 36 genes, 25.0%
purine ribonucleotide metabolic process	9 of 36 genes, 25.0%
ribonucleotide metabolic process	9 of 36 genes, 25.0%
carboxylic acid metabolic process	13 of 36 genes, 36.1%
oxoacid metabolic process	13 of 36 genes, 36.1%
organic acid metabolic process	13 of 36 genes, 36.1%
aromatic amino acid family biosynthetic process	5 of 36 genes, 13.9%
kynurenine metabolic process	3 of 36 genes, 8.3%
pentose-phosphate shunt	4 of 36 genes, 11.1%
glyceraldehyde-3-phosphate metabolic process	4 of 36 genes, 11.1%
glucose 6-phosphate metabolic process	4 of 36 genes, 11.1%
cellular process	36 of 36 genes, 100.0%
benzene-containing compound metabolic process	3 of 36 genes, 8.3%
alpha-amino acid biosynthetic process	6 of 36 genes, 16.7%
cellular amino acid biosynthetic process	6 of 36 genes, 16.7%
tryptophan catabolic process to kynurenine	2 of 36 genes, 5.6%
'de novo' AMP biosynthetic process	2 of 36 genes, 5.6%
quinolinate metabolic process	2 of 36 genes, 5.6%

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.4705), HDA (7284),
447), ISS (1792),
P (13387), TAS (465),
(9), HGI (16),

Genome frequency	Corrected p-value	FDR	False Positives	Genes annotated to th
770 of 7166 genes, 10.7%	2.56E-41	0.00%		0 ADE13, UTR1, TRP1, TK
221 of 7166 genes, 3.1%	6.15E-38	0.00%		0 ADE13, UTR1, TKL1, BN
226 of 7166 genes, 3.2%	1.38E-37	0.00%		0 ADE13, UTR1, TKL1, BN
262 of 7166 genes, 3.7%	2.82E-35	0.00%		0 ADE13, UTR1, TKL1, BN
126 of 7166 genes, 1.8%	3.85E-29	0.00%		0 ADE13, ADE5,7, PRS1, I
398 of 7166 genes, 5.6%	6.66E-29	0.00%		0 ADE13, UTR1, TKL1, BN
129 of 7166 genes, 1.8%	7.32E-29	0.00%		0 ADE13, ADE5,7, PRS1, I
704 of 7166 genes, 9.8%	5.71E-26	0.00%		0 ADE13, UTR1, TKL1, BN
80 of 7166 genes, 1.1%	6.18E-23	0.00%		0 RPE1, UTR1, BNA6, TKL
81 of 7166 genes, 1.1%	8.03E-23	0.00%		0 RPE1, UTR1, BNA6, TKL
164 of 7166 genes, 2.3%	8.98E-23	0.00%		0 RPE1, ADE13, PRS1, PR
92 of 7166 genes, 1.3%	1.15E-21	0.00%		0 RPE1, UTR1, BNA6, TKL
248 of 7166 genes, 3.5%	2.05E-21	0.00%		0 ADE13, ADE5,7, PRS1, I
96 of 7166 genes, 1.3%	2.79E-21	0.00%		0 RPE1, UTR1, BNA6, TKL
686 of 7166 genes, 9.6%	6.61E-21	0.00%		0 ADE13, UTR1, TKL1, BN
21 of 7166 genes, 0.3%	5.11E-17	0.00%		0 RPE1, TKL2, GND2, GNI
16 of 7166 genes, 0.2%	2.06E-16	0.00%		0 TRP2, TRP3, TRP1, BNA
16 of 7166 genes, 0.2%	2.06E-16	0.00%		0 TRP2, TRP3, TRP1, BNA
16 of 7166 genes, 0.2%	2.06E-16	0.00%		0 TRP2, TRP3, TRP1, BNA
11 of 7166 genes, 0.2%	2.47E-16	0.00%		0 ADE13, ADE8, ADE6, AI
172 of 7166 genes, 2.4%	3.13E-16	0.00%		0 RPE1, UTR1, BNA6, TKL
35 of 7166 genes, 0.5%	6.34E-16	0.00%		0 TRP2, TRP3, TRP1, BNA
8 of 7166 genes, 0.1%	7.56E-16	0.00%		0 ADE13, ADE8, ADE6, AI
87 of 7166 genes, 1.2%	2.39E-15	0.00%		0 ADE13, ADE8, ADE6, AI
13 of 7166 genes, 0.2%	3.17E-15	0.00%		0 RPE1, TKL2, GND2, GNI
13 of 7166 genes, 0.2%	3.17E-15	0.00%		0 RPE1, TKL2, GND2, GNI
348 of 7166 genes, 4.9%	3.45E-15	0.00%		0 RPE1, ADE13, PRS1, PR
982 of 7166 genes, 13.7%	9.67E-15	0.00%		0 ADE13, UTR1, TRP1, BN
96 of 7166 genes, 1.3%	1.13E-14	0.00%		0 ADE13, ADE8, ADE6, AI
10 of 7166 genes, 0.1%	3.36E-14	0.00%		0 ADE13, ADE8, ADE6, AI
24 of 7166 genes, 0.3%	4.85E-14	0.00%		0 TRP2, TRP3, TRP1, BNA
16 of 7166 genes, 0.2%	5.00E-14	0.00%		0 RPE1, TKL2, GND2, GNI

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2	1038 of 7166 genes, 14.5%	5.30E-14	0.00%	0 ADE13, UTR1, TRP1, BN
3	91 of 7166 genes, 1.3%	1.81E-13	0.00%	0 ADE13, ADE8, ADE6, AI
4	243 of 7166 genes, 3.4%	2.22E-13	0.00%	0 RPE1, UTR1, BNA6, TKL
5	1978 of 7166 genes, 27.6%	1.05E-12	0.00%	0 ADE13, UTR1, TRP1, TK
6	997 of 7166 genes, 13.9%	1.76E-12	0.00%	0 ADE13, TRP2, ADE5,7, I
7	14 of 7166 genes, 0.2%	2.19E-12	0.00%	0 BNA6, BNA4, BNA5, BN
8	1282 of 7166 genes, 17.9%	3.42E-12	0.00%	0 ADE13, UTR1, TRP1, BN
9	2045 of 7166 genes, 28.5%	3.70E-12	0.00%	0 ADE13, UTR1, TRP1, TK
10	148 of 7166 genes, 2.1%	8.92E-12	0.00%	0 ADE13, ADE8, ADE6, AI
11	38 of 7166 genes, 0.5%	1.08E-11	0.00%	0 TRP2, TRP3, TRP1, BNA
12	39 of 7166 genes, 0.5%	1.45E-11	0.00%	0 TRP2, TRP3, TRP1, BNA
13	2260 of 7166 genes, 31.5%	1.63E-11	0.00%	0 ADE13, UTR1, TRP1, TK
14	58 of 7166 genes, 0.8%	2.73E-11	0.00%	0 UTR1, BNA6, BNA4, YEI
15	164 of 7166 genes, 2.3%	4.14E-11	0.00%	0 ADE13, ADE8, ADE6, AI
16	45 of 7166 genes, 0.6%	7.08E-11	0.00%	0 UTR1, BNA6, BNA4, YEI
17	46 of 7166 genes, 0.6%	9.00E-11	0.00%	0 UTR1, BNA6, BNA4, YEI
18	1991 of 7166 genes, 27.8%	1.20E-10	0.00%	0 ADE13, UTR1, TRP1, TK
19	7 of 7166 genes, 0.1%	1.36E-10	0.00%	0 BNA5, BNA2, BNA6, NM
20	412 of 7166 genes, 5.7%	3.00E-10	0.00%	0 TRP2, TRP1, BNA6, ARC
21	413 of 7166 genes, 5.8%	3.13E-10	0.00%	0 TRP2, TRP1, BNA6, ARC
22	26 of 7166 genes, 0.4%	1.07E-09	0.00%	0 BNA6, BNA4, BNA5, BN
23	5 of 7166 genes, 0.1%	3.04E-09	0.00%	0 PRS4, PRS3, PRS1, PRS!
24	5 of 7166 genes, 0.1%	3.04E-09	0.00%	0 BNA5, BNA2, BNA6, BN
25	5 of 7166 genes, 0.1%	3.04E-09	0.00%	0 PRS4, PRS3, PRS1, PRS!
26	3854 of 7166 genes, 53.8%	3.23E-09	0.00%	0 ADE13, UTR1, TRP1, TK
27	46 of 7166 genes, 0.6%	4.11E-09	0.00%	0 RPE1, TKL2, GND2, GNI
28	3950 of 7166 genes, 55.1%	1.02E-08	0.00%	0 ADE13, UTR1, TRP1, TK
29	6 of 7166 genes, 0.1%	1.81E-08	0.00%	0 TRP5, TRP2, TRP3, TRP!
30	6 of 7166 genes, 0.1%	1.81E-08	0.00%	0 TRP5, TRP2, TRP3, TRP!
31	6 of 7166 genes, 0.1%	1.81E-08	0.00%	0 TRP5, TRP2, TRP3, TRP!
32	22 of 7166 genes, 0.3%	1.93E-08	0.00%	0 TRP5, TRP2, TRP3, TRP!
33	3795 of 7166 genes, 53.0%	2.35E-08	0.00%	0 ADE13, UTR1, TRP1, TK
34	911 of 7166 genes, 12.7%	5.63E-08	0.00%	0 ADE13, ADE5,7, PRS1, I
35	7 of 7166 genes, 0.1%	6.33E-08	0.00%	0 GND2, GND1, ZWF1, SC
36	63 of 7166 genes, 0.9%	8.07E-08	0.00%	0 ADE13, ADE8, ADE6, AI
37	63 of 7166 genes, 0.9%	8.07E-08	0.00%	0 ADE13, ADE8, ADE6, AI
38	231 of 7166 genes, 3.2%	8.07E-08	0.00%	0 TRP2, TRP3, TRP1, BNA
39	65 of 7166 genes, 0.9%	1.07E-07	0.00%	0 ADE13, ADE8, ADE6, AI
40	237 of 7166 genes, 3.3%	1.13E-07	0.00%	0 ADE13, ADE8, ADE6, AI
41	157 of 7166 genes, 2.2%	1.24E-07	0.00%	0 TRP2, TRP3, TRP1, BNA
42	70 of 7166 genes, 1.0%	2.13E-07	0.00%	0 ADE13, ADE8, ADE6, AI
43	2651 of 7166 genes, 37.0%	3.32E-07	0.00%	0 ADE13, UTR1, TRP1, TK
44	1897 of 7166 genes, 26.5%	3.99E-07	0.00%	0 ADE13, UTR1, TKL1, BN
45	140 of 7166 genes, 2.0%	5.31E-07	0.00%	0 UTR1, BNA6, BNA4, YEI
46	10 of 7166 genes, 0.1%	7.47E-07	0.00%	0 TRP5, TRP2, TRP3, TRP!
47	10 of 7166 genes, 0.1%	7.47E-07	0.00%	0 TRP5, TRP2, TRP3, TRP!
48	81 of 7166 genes, 1.1%	8.08E-07	0.00%	0 ADE13, ADE8, ADE6, AI
49	85 of 7166 genes, 1.2%	1.24E-06	0.00%	0 ADE13, ADE8, ADE6, AI
50	1753 of 7166 genes, 24.5%	1.37E-06	0.00%	0 ADE13, UTR1, TRP1, BN
51	397 of 7166 genes, 5.5%	1.42E-06	0.00%	0 TRP2, TRP3, TRP1, FUN
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2	119 of 7166 genes, 1.7%	1.60E-06	0.00%	0 UTR1, BNA6, BNA4, YEI
3	2250 of 7166 genes, 31.4%	1.89E-06	0.00%	0 ADE13, UTR1, TRP1, BN
4	12 of 7166 genes, 0.2%	2.32E-06	0.00%	0 PHO87, PHO89, PHO91
5	2284 of 7166 genes, 31.9%	2.96E-06	0.00%	0 ADE13, UTR1, TRP1, BN
6	45 of 7166 genes, 0.6%	4.54E-06	0.00%	0 ARO1, FUM1, BNA6, AI
7	109 of 7166 genes, 1.5%	1.13E-05	0.00%	0 ADE13, ADE8, ADE6, AI
8	109 of 7166 genes, 1.5%	1.13E-05	0.00%	0 ADE13, ADE8, ADE6, AI
9	111 of 7166 genes, 1.5%	1.33E-05	0.00%	0 ADE13, ADE8, ADE6, AI
10	2277 of 7166 genes, 31.8%	1.35E-05	0.00%	0 ADE13, UTR1, TRP1, BN
11	3454 of 7166 genes, 48.2%	1.72E-05	0.00%	0 ADE13, UTR1, TRP1, TK
12	116 of 7166 genes, 1.6%	1.96E-05	0.00%	0 ADE13, ADE8, ADE6, AI
13	8 of 7166 genes, 0.1%	3.18E-05	0.00%	0 PHO87, PHO89, PHO91
14	63 of 7166 genes, 0.9%	5.03E-05	0.00%	0 CTP1, PHO87, AGC1, PI
15	3 of 7166 genes, 0.0%	6.92E-05	0.00%	0 BNA5, BNA2, BNA4
16	3611 of 7166 genes, 50.4%	8.49E-05	0.00%	0 ADE13, UTR1, TRP1, TK
17	140 of 7166 genes, 2.0%	9.90E-05	0.00%	0 ADE13, ADE8, ADE6, AI
18	144 of 7166 genes, 2.0%	0.00012	0.00%	0 ADE13, ADE8, ADE6, AI
19	112 of 7166 genes, 1.6%	0.0002	0.00%	0 TRP2, TRP3, TRP1, ARC
20	4 of 7166 genes, 0.1%	0.00027	0.00%	0 ARO1, ARO3, ARO2
21	4 of 7166 genes, 0.1%	0.00027	0.00%	0 ARO1, ARO3, ARO2
22	4 of 7166 genes, 0.1%	0.00027	0.00%	0 PHO87, PHO91, PHO9C
23	4 of 7166 genes, 0.1%	0.00027	0.00%	0 PHO87, PHO91, PHO9C
24	4 of 7166 genes, 0.1%	0.00027	0.00%	0 PHO87, PHO91, PHO9C
25	4 of 7166 genes, 0.1%	0.00027	0.00%	0 PHO87, PHO91, PHO9C
26	29 of 7166 genes, 0.4%	0.00031	0.00%	0 PHO87, PHO89, PHO91
27	14 of 7166 genes, 0.2%	0.00044	0.00%	0 PHO87, PHO91, PHO84
28	5024 of 7166 genes, 70.1%	0.00066	0.00%	0 ADE13, UTR1, TRP1, TK
29	5 of 7166 genes, 0.1%	0.00068	0.00%	0 PHO87, PHO91, PHO9C
30	5 of 7166 genes, 0.1%	0.00068	0.00%	0 PHO87, PHO91, PHO9C
31	16 of 7166 genes, 0.2%	0.00079	0.00%	0 PHO87, PHO89, PHO91
32	201 of 7166 genes, 2.8%	0.002	0.00%	0 TRP2, TRP3, TRP1, ARC
33	201 of 7166 genes, 2.8%	0.002	0.00%	0 TRP2, TRP3, TRP1, ARC
34	8 of 7166 genes, 0.1%	0.00378	0.00%	0 BNA5, BNA2, BNA4
35	126 of 7166 genes, 1.8%	0.00546	0.00%	0 CTP1, PHO87, AGC1, PI
36	9 of 7166 genes, 0.1%	0.00564	0.00%	0 PHO87, PHO91, PHO9C
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41	770 of 7166 genes, 10.7%	1.60E-42	0.00%	0 ADE13, UTR1, TRP1, TK
42	221 of 7166 genes, 3.1%	2.02E-38	0.00%	0 ADE13, UTR1, TKL1, BN
43	226 of 7166 genes, 3.2%	4.55E-38	0.00%	0 ADE13, UTR1, TKL1, BN
44	262 of 7166 genes, 3.7%	9.32E-36	0.00%	0 ADE13, UTR1, TKL1, BN
45	126 of 7166 genes, 1.8%	1.91E-29	0.00%	0 ADE13, ADE5,7, PRS1, I
46	398 of 7166 genes, 5.6%	2.24E-29	0.00%	0 ADE13, UTR1, TKL1, BN
47	129 of 7166 genes, 1.8%	3.63E-29	0.00%	0 ADE13, ADE5,7, PRS1, I
48	704 of 7166 genes, 9.8%	1.53E-26	0.00%	0 ADE13, UTR1, TKL1, BN
49	80 of 7166 genes, 1.1%	3.75E-23	0.00%	0 RPE1, UTR1, BNA6, TKL
50	164 of 7166 genes, 2.3%	4.83E-23	0.00%	0 RPE1, ADE13, PRS1, PR
51	81 of 7166 genes, 1.1%	4.88E-23	0.00%	0 RPE1, UTR1, BNA6, TKL
52	92 of 7166 genes, 1.3%	7.05E-22	0.00%	0 RPE1, UTR1, BNA6, TKL
53	248 of 7166 genes, 3.5%	1.03E-21	0.00%	0 ADE13, ADE5,7, PRS1, I
54	96 of 7166 genes, 1.3%	1.70E-21	0.00%	0 RPE1, UTR1, BNA6, TKL
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2	686 of 7166 genes, 9.6%	2.32E-21	0.00%	0 ADE13, UTR1, TKL1, BN
3	21 of 7166 genes, 0.3%	3.86E-17	0.00%	0 RPE1, TKL2, GND2, GNI
4	16 of 7166 genes, 0.2%	1.59E-16	0.00%	0 TRP2, TRP3, TRP1, BNA
5	16 of 7166 genes, 0.2%	1.59E-16	0.00%	0 TRP2, TRP3, TRP1, BNA
6	16 of 7166 genes, 0.2%	1.59E-16	0.00%	0 TRP2, TRP3, TRP1, BNA
7	172 of 7166 genes, 2.4%	1.92E-16	0.00%	0 RPE1, UTR1, BNA6, TKL
8	11 of 7166 genes, 0.2%	1.95E-16	0.00%	0 ADE13, ADE8, ADE6, AI
9	35 of 7166 genes, 0.5%	4.67E-16	0.00%	0 TRP2, TRP3, TRP1, BNA
10	8 of 7166 genes, 0.1%	6.12E-16	0.00%	0 ADE13, ADE8, ADE6, AI
11	87 of 7166 genes, 1.2%	1.63E-15	0.00%	0 ADE13, ADE8, ADE6, AI
12	348 of 7166 genes, 4.9%	1.90E-15	0.00%	0 RPE1, ADE13, PRS1, PR
13	13 of 7166 genes, 0.2%	2.51E-15	0.00%	0 RPE1, TKL2, GND2, GNI
14	13 of 7166 genes, 0.2%	2.51E-15	0.00%	0 RPE1, TKL2, GND2, GNI
15	982 of 7166 genes, 13.7%	3.76E-15	0.00%	0 ADE13, UTR1, TRP1, BN
16	96 of 7166 genes, 1.3%	7.80E-15	0.00%	0 ADE13, ADE8, ADE6, AI
17	1038 of 7166 genes, 14.5%	2.08E-14	0.00%	0 ADE13, UTR1, TRP1, BN
18	10 of 7166 genes, 0.1%	2.72E-14	0.00%	0 ADE13, ADE8, ADE6, AI
19	24 of 7166 genes, 0.3%	3.76E-14	0.00%	0 TRP2, TRP3, TRP1, BNA
20	16 of 7166 genes, 0.2%	3.96E-14	0.00%	0 RPE1, TKL2, GND2, GNI
21	91 of 7166 genes, 1.3%	1.27E-13	0.00%	0 ADE13, ADE8, ADE6, AI
22	243 of 7166 genes, 3.4%	1.38E-13	0.00%	0 RPE1, UTR1, BNA6, TKL
23	1978 of 7166 genes, 27.6%	2.71E-13	0.00%	0 ADE13, UTR1, TRP1, TK
24	997 of 7166 genes, 13.9%	7.67E-13	0.00%	0 ADE13, TRP2, ADE5,7, I
25	2045 of 7166 genes, 28.5%	9.62E-13	0.00%	0 ADE13, UTR1, TRP1, TK
26	1282 of 7166 genes, 17.9%	1.32E-12	0.00%	0 ADE13, UTR1, TRP1, BN
27	14 of 7166 genes, 0.2%	1.78E-12	0.00%	0 BNA6, BNA4, BNA5, BN
28	2260 of 7166 genes, 31.5%	3.97E-12	0.00%	0 ADE13, UTR1, TRP1, TK
29	148 of 7166 genes, 2.1%	6.15E-12	0.00%	0 ADE13, ADE8, ADE6, AI
30	38 of 7166 genes, 0.5%	8.43E-12	0.00%	0 TRP2, TRP3, TRP1, BNA
31	39 of 7166 genes, 0.5%	1.12E-11	0.00%	0 TRP2, TRP3, TRP1, BNA
32	58 of 7166 genes, 0.8%	2.06E-11	0.00%	0 UTR1, BNA6, BNA4, YEI
33	164 of 7166 genes, 2.3%	2.86E-11	0.00%	0 ADE13, ADE8, ADE6, AI
34	1991 of 7166 genes, 27.8%	3.72E-11	0.00%	0 ADE13, UTR1, TRP1, TK
35	45 of 7166 genes, 0.6%	5.49E-11	0.00%	0 UTR1, BNA6, BNA4, YEI
36	46 of 7166 genes, 0.6%	6.98E-11	0.00%	0 UTR1, BNA6, BNA4, YEI
37	7 of 7166 genes, 0.1%	1.15E-10	0.00%	0 BNA5, BNA2, BNA6, NM
38	412 of 7166 genes, 5.7%	1.84E-10	0.00%	0 TRP2, TRP1, BNA6, ARC
39	413 of 7166 genes, 5.8%	1.93E-10	0.00%	0 TRP2, TRP1, BNA6, ARC
40	26 of 7166 genes, 0.4%	8.70E-10	0.00%	0 BNA6, BNA4, BNA5, BN
41	5 of 7166 genes, 0.1%	2.64E-09	0.00%	0 PRS4, PRS3, PRS1, PRS
42	5 of 7166 genes, 0.1%	2.64E-09	0.00%	0 BNA5, BNA2, BNA6, BN
43	5 of 7166 genes, 0.1%	2.64E-09	0.00%	0 PRS4, PRS3, PRS1, PRS
44	3795 of 7166 genes, 53.0%	2.74E-09	0.00%	0 ADE13, UTR1, TRP1, TK
45	46 of 7166 genes, 0.6%	3.26E-09	0.00%	0 RPE1, TKL2, GND2, GNI
46	3854 of 7166 genes, 53.8%	5.59E-09	0.00%	0 ADE13, UTR1, TRP1, TK
47	6 of 7166 genes, 0.1%	1.57E-08	0.00%	0 TRP5, TRP2, TRP3, TRP
48	6 of 7166 genes, 0.1%	1.57E-08	0.00%	0 TRP5, TRP2, TRP3, TRP
49	6 of 7166 genes, 0.1%	1.57E-08	0.00%	0 TRP5, TRP2, TRP3, TRP
50	22 of 7166 genes, 0.3%	1.60E-08	0.00%	0 TRP5, TRP2, TRP3, TRP
51	3950 of 7166 genes, 55.1%	1.73E-08	0.00%	0 ADE13, UTR1, TRP1, TK
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2	911 of 7166 genes, 12.7%	3.13E-08	0.00%	0 ADE13, ADE5,7, PRS1, I
3	7 of 7166 genes, 0.1%	5.48E-08	0.00%	0 GND2, GND1, ZWF1, SC
4	231 of 7166 genes, 3.2%	5.79E-08	0.00%	0 TRP2, TRP3, TRP1, BNA
5	63 of 7166 genes, 0.9%	6.43E-08	0.00%	0 ADE13, ADE8, ADE6, AI
6	63 of 7166 genes, 0.9%	6.43E-08	0.00%	0 ADE13, ADE8, ADE6, AI
7	237 of 7166 genes, 3.3%	8.14E-08	0.00%	0 ADE13, ADE8, ADE6, AI
8	65 of 7166 genes, 0.9%	8.59E-08	0.00%	0 ADE13, ADE8, ADE6, AI
9	157 of 7166 genes, 2.2%	9.31E-08	0.00%	0 TRP2, TRP3, TRP1, BNA
10	70 of 7166 genes, 1.0%	1.70E-07	0.00%	0 ADE13, ADE8, ADE6, AI
11	1897 of 7166 genes, 26.5%	1.71E-07	0.00%	0 ADE13, UTR1, TKL1, BN
12	140 of 7166 genes, 2.0%	4.07E-07	0.00%	0 UTR1, BNA6, BNA4, YEI
13	81 of 7166 genes, 1.1%	6.45E-07	0.00%	0 ADE13, ADE8, ADE6, AI
14	10 of 7166 genes, 0.1%	6.48E-07	0.00%	0 TRP5, TRP2, TRP3, TRP
15	10 of 7166 genes, 0.1%	6.48E-07	0.00%	0 TRP5, TRP2, TRP3, TRP
16	2651 of 7166 genes, 37.0%	6.85E-07	0.00%	0 ADE13, UTR1, TRP1, TK
17	397 of 7166 genes, 5.5%	9.91E-07	0.00%	0 TRP2, TRP3, TRP1, FUN
18	85 of 7166 genes, 1.2%	9.97E-07	0.00%	0 ADE13, ADE8, ADE6, AI
19	119 of 7166 genes, 1.7%	1.25E-06	0.00%	0 UTR1, BNA6, BNA4, YEI
20	12 of 7166 genes, 0.2%	2.01E-06	0.00%	0 PHO87, PHO89, PHO91
21	1753 of 7166 genes, 24.5%	3.45E-06	0.00%	0 ADE13, TRP2, ADE5,7, I
22	45 of 7166 genes, 0.6%	3.78E-06	0.00%	0 ARO1, FUM1, BNA6, AI
23	2250 of 7166 genes, 31.4%	4.16E-06	0.00%	0 ADE13, UTR1, TRP1, BN
24	2277 of 7166 genes, 31.8%	5.86E-06	0.00%	0 ADE13, UTR1, TRP1, BN
25	2284 of 7166 genes, 31.9%	6.39E-06	0.00%	0 ADE13, UTR1, TRP1, BN
26	109 of 7166 genes, 1.5%	9.12E-06	0.00%	0 ADE13, ADE8, ADE6, AI
27	109 of 7166 genes, 1.5%	9.12E-06	0.00%	0 ADE13, ADE8, ADE6, AI
28	111 of 7166 genes, 1.5%	1.06E-05	0.00%	0 ADE13, ADE8, ADE6, AI
29	116 of 7166 genes, 1.6%	1.57E-05	0.00%	0 ADE13, ADE8, ADE6, AI
30	3611 of 7166 genes, 50.4%	2.49E-05	0.00%	0 ADE13, UTR1, TRP1, TK
31	8 of 7166 genes, 0.1%	2.81E-05	0.00%	0 PHO87, PHO89, PHO91
32	3454 of 7166 genes, 48.2%	2.92E-05	0.00%	0 ADE13, UTR1, TRP1, TK
33	3 of 7166 genes, 0.0%	6.26E-05	0.00%	0 BNA5, BNA2, BNA4
34	140 of 7166 genes, 2.0%	7.97E-05	0.00%	0 ADE13, ADE8, ADE6, AI
35	144 of 7166 genes, 2.0%	0.0001	0.00%	0 ADE13, ADE8, ADE6, AI
36	112 of 7166 genes, 1.6%	0.00016	0.00%	0 TRP2, TRP3, TRP1, ARC
37	4 of 7166 genes, 0.1%	0.00024	0.00%	0 ARO1, ARO3, ARO2
38	4 of 7166 genes, 0.1%	0.00024	0.00%	0 ARO1, ARO3, ARO2
39	4 of 7166 genes, 0.1%	0.00024	0.00%	0 PHO87, PHO91, PHO9C
40	4 of 7166 genes, 0.1%	0.00024	0.00%	0 PHO87, PHO91, PHO9C
41	4 of 7166 genes, 0.1%	0.00024	0.00%	0 PHO87, PHO91, PHO9C
42	29 of 7166 genes, 0.4%	0.00027	0.00%	0 PHO87, PHO89, PHO91
43	14 of 7166 genes, 0.2%	0.00039	0.00%	0 PHO87, PHO91, PHO84
44	5 of 7166 genes, 0.1%	0.00062	0.00%	0 PHO87, PHO91, PHO9C
45	5 of 7166 genes, 0.1%	0.00062	0.00%	0 PHO87, PHO91, PHO9C
46	16 of 7166 genes, 0.2%	0.0007	0.00%	0 PHO87, PHO89, PHO91
47	63 of 7166 genes, 0.9%	0.00083	0.00%	0 CTP1, PHO87, PHO89, I
48	5024 of 7166 genes, 70.1%	0.00088	0.00%	0 ADE13, UTR1, TRP1, TK
49	201 of 7166 genes, 2.8%	0.00162	0.00%	0 TRP2, TRP3, TRP1, ARC
50	201 of 7166 genes, 2.8%	0.00162	0.00%	0 TRP2, TRP3, TRP1, ARC
51	8 of 7166 genes, 0.1%	0.00342	0.00%	0 BNA5, BNA2, BNA4
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2	9 of 7166 genes, 0.1%	0.00511	0.00%	0 PHO87, PHO91, PHO9C
3	2 of 7166 genes, 0.0%	0.00935	0.05%	0.06 BNA5, BNA2
4	2 of 7166 genes, 0.0%	0.00935	0.05%	0.06 ADE13, ADE12
5	2 of 7166 genes, 0.0%	0.00935	0.05%	0.06 BNA6, BNA1
6	11 of 7166 genes, 0.2%	0.00993	0.05%	0.06 PHO87, PHO91, PHO9C
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9	770 of 7166 genes, 10.7%	1.15E-37	0.00%	0 ADE13, UTR1, TRP1, TK
10	221 of 7166 genes, 3.1%	1.90E-31	0.00%	0 RPE1, ADE13, ADE5,7, I
11	226 of 7166 genes, 3.2%	3.77E-31	0.00%	0 RPE1, ADE13, ADE5,7, I
12	126 of 7166 genes, 1.8%	4.98E-31	0.00%	0 ADE13, ADE5,7, PRS1, I
13	129 of 7166 genes, 1.8%	9.49E-31	0.00%	0 ADE13, ADE5,7, PRS1, I
14	262 of 7166 genes, 3.7%	3.31E-29	0.00%	0 RPE1, ADE13, ADE5,7, I
15	398 of 7166 genes, 5.6%	7.89E-24	0.00%	0 RPE1, ADE13, ADE5,7, I
16	248 of 7166 genes, 3.5%	2.94E-23	0.00%	0 ADE13, ADE5,7, PRS1, I
17	704 of 7166 genes, 9.8%	4.84E-22	0.00%	0 ADE13, UTR1, TKL1, BN
18	982 of 7166 genes, 13.7%	2.13E-17	0.00%	0 ADE13, UTR1, TRP1, BN
19	686 of 7166 genes, 9.6%	4.52E-17	0.00%	0 RPE1, ADE13, ADE5,7, I
20	16 of 7166 genes, 0.2%	4.83E-17	0.00%	0 TRP2, TRP3, TRP1, BNA
21	16 of 7166 genes, 0.2%	4.83E-17	0.00%	0 TRP2, TRP3, TRP1, BNA
22	16 of 7166 genes, 0.2%	4.83E-17	0.00%	0 TRP2, TRP3, TRP1, BNA
23	11 of 7166 genes, 0.2%	6.71E-17	0.00%	0 ADE13, ADE8, ADE6, AI
24	35 of 7166 genes, 0.5%	1.08E-16	0.00%	0 TRP2, TRP3, TRP1, BNA
25	1038 of 7166 genes, 14.5%	1.23E-16	0.00%	0 ADE13, UTR1, TRP1, BN
26	164 of 7166 genes, 2.3%	2.21E-16	0.00%	0 RPE1, ADE13, PRS1, PR
27	8 of 7166 genes, 0.1%	2.38E-16	0.00%	0 ADE13, ADE8, ADE6, AI
28	87 of 7166 genes, 1.2%	2.55E-16	0.00%	0 ADE13, ADE8, ADE6, AI
29	96 of 7166 genes, 1.3%	1.22E-15	0.00%	0 ADE13, ADE8, ADE6, AI
30	80 of 7166 genes, 1.1%	3.42E-15	0.00%	0 RPE1, TKL2, UTR1, BNA
31	81 of 7166 genes, 1.1%	4.12E-15	0.00%	0 RPE1, TKL2, UTR1, BNA
32	1282 of 7166 genes, 17.9%	6.70E-15	0.00%	0 ADE13, UTR1, TRP1, BN
33	997 of 7166 genes, 13.9%	8.24E-15	0.00%	0 ADE13, TRP2, ADE5,7, I
34	10 of 7166 genes, 0.1%	1.06E-14	0.00%	0 ADE13, ADE8, ADE6, AI
35	24 of 7166 genes, 0.3%	1.14E-14	0.00%	0 TRP2, TRP3, TRP1, BNA
36	91 of 7166 genes, 1.3%	2.32E-14	0.00%	0 ADE13, ADE8, ADE6, AI
37	92 of 7166 genes, 1.3%	2.72E-14	0.00%	0 RPE1, TKL2, UTR1, BNA
38	96 of 7166 genes, 1.3%	5.09E-14	0.00%	0 RPE1, TKL2, UTR1, BNA
39	14 of 7166 genes, 0.2%	6.96E-13	0.00%	0 BNA6, BNA4, BNA5, BN
40	148 of 7166 genes, 2.1%	9.98E-13	0.00%	0 ADE13, ADE8, ADE6, AI
41	38 of 7166 genes, 0.5%	2.58E-12	0.00%	0 TRP2, TRP3, TRP1, BNA
42	39 of 7166 genes, 0.5%	3.46E-12	0.00%	0 TRP2, TRP3, TRP1, BNA
43	164 of 7166 genes, 2.3%	4.70E-12	0.00%	0 ADE13, ADE8, ADE6, AI
44	58 of 7166 genes, 0.8%	5.61E-12	0.00%	0 UTR1, BNA6, BNA4, YEI
45	412 of 7166 genes, 5.7%	1.57E-11	0.00%	0 TRP2, TRP1, BNA6, ARC
46	413 of 7166 genes, 5.8%	1.65E-11	0.00%	0 TRP2, TRP1, BNA6, ARC
47	45 of 7166 genes, 0.6%	1.69E-11	0.00%	0 UTR1, BNA6, BNA4, YEI
48	46 of 7166 genes, 0.6%	2.15E-11	0.00%	0 UTR1, BNA6, BNA4, YEI
49	7 of 7166 genes, 0.1%	5.74E-11	0.00%	0 BNA5, BNA2, BNA6, NM
50	1978 of 7166 genes, 27.6%	6.26E-11	0.00%	0 ADE13, UTR1, TRP1, TK
51	348 of 7166 genes, 4.9%	1.43E-10	0.00%	0 RPE1, ADE13, PRS1, PR
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2045 of 7166 genes, 28.5%	1.87E-10	0.00%	0 ADE13, UTR1, TRP1, TK
172 of 7166 genes, 2.4%	2.05E-10	0.00%	0 RPE1, TKL2, UTR1, BNA
26 of 7166 genes, 0.4%	3.42E-10	0.00%	0 BNA6, BNA4, BNA5, BN
2260 of 7166 genes, 31.5%	5.30E-10	0.00%	0 ADE13, UTR1, TRP1, TK
911 of 7166 genes, 12.7%	1.43E-09	0.00%	0 ADE13, ADE5,7, PRS1, I
5 of 7166 genes, 0.1%	1.47E-09	0.00%	0 PRS4, PRS3, PRS1, PRS
5 of 7166 genes, 0.1%	1.47E-09	0.00%	0 BNA5, BNA2, BNA6, BN
5 of 7166 genes, 0.1%	1.47E-09	0.00%	0 PRS4, PRS3, PRS1, PRS
1991 of 7166 genes, 27.8%	6.39E-09	0.00%	0 ADE13, UTR1, TRP1, TK
22 of 7166 genes, 0.3%	7.14E-09	0.00%	0 TRP5, TRP2, TRP3, TRP
6 of 7166 genes, 0.1%	8.81E-09	0.00%	0 TRP5, TRP2, TRP3, TRP
6 of 7166 genes, 0.1%	8.81E-09	0.00%	0 TRP5, TRP2, TRP3, TRP
6 of 7166 genes, 0.1%	8.81E-09	0.00%	0 TRP5, TRP2, TRP3, TRP
231 of 7166 genes, 3.2%	1.15E-08	0.00%	0 TRP2, TRP3, TRP1, BNA
237 of 7166 genes, 3.3%	1.62E-08	0.00%	0 ADE13, ADE8, ADE6, AI
243 of 7166 genes, 3.4%	2.27E-08	0.00%	0 RPE1, TKL2, UTR1, BNA
63 of 7166 genes, 0.9%	2.28E-08	0.00%	0 ADE13, ADE8, ADE6, AI
63 of 7166 genes, 0.9%	2.28E-08	0.00%	0 ADE13, ADE8, ADE6, AI
157 of 7166 genes, 2.2%	2.35E-08	0.00%	0 TRP2, TRP3, TRP1, BNA
65 of 7166 genes, 0.9%	3.05E-08	0.00%	0 ADE13, ADE8, ADE6, AI
2250 of 7166 genes, 31.4%	3.43E-08	0.00%	0 ADE13, UTR1, TRP1, BN
2277 of 7166 genes, 31.8%	4.95E-08	0.00%	0 ADE13, UTR1, TRP1, BN
3795 of 7166 genes, 53.0%	5.33E-08	0.00%	0 ADE13, UTR1, TRP1, TK
2284 of 7166 genes, 31.9%	5.44E-08	0.00%	0 ADE13, UTR1, TRP1, BN
70 of 7166 genes, 1.0%	6.07E-08	0.00%	0 ADE13, ADE8, ADE6, AI
1753 of 7166 genes, 24.5%	6.92E-08	0.00%	0 ADE13, TRP2, ADE5,7, I
3854 of 7166 genes, 53.8%	1.00E-07	0.00%	0 ADE13, UTR1, TRP1, TK
140 of 7166 genes, 2.0%	1.16E-07	0.00%	0 UTR1, BNA6, BNA4, YEI
397 of 7166 genes, 5.5%	1.63E-07	0.00%	0 TRP2, TRP3, TRP1, FUN
81 of 7166 genes, 1.1%	2.31E-07	0.00%	0 ADE13, ADE8, ADE6, AI
3950 of 7166 genes, 55.1%	2.75E-07	0.00%	0 ADE13, UTR1, TRP1, TK
85 of 7166 genes, 1.2%	3.59E-07	0.00%	0 ADE13, ADE8, ADE6, AI
10 of 7166 genes, 0.1%	3.63E-07	0.00%	0 TRP5, TRP2, TRP3, TRP
10 of 7166 genes, 0.1%	3.63E-07	0.00%	0 TRP5, TRP2, TRP3, TRP
119 of 7166 genes, 1.7%	4.04E-07	0.00%	0 UTR1, BNA6, BNA4, YEI
21 of 7166 genes, 0.3%	4.17E-07	0.00%	0 YEF1, RPE1, TKL2, RKI1
12 of 7166 genes, 0.2%	1.13E-06	0.00%	0 PHO87, PHO89, PHO91
45 of 7166 genes, 0.6%	1.70E-06	0.00%	0 ARO1, FUM1, BNA6, AI
109 of 7166 genes, 1.5%	3.33E-06	0.00%	0 ADE13, ADE8, ADE6, AI
109 of 7166 genes, 1.5%	3.33E-06	0.00%	0 ADE13, ADE8, ADE6, AI
111 of 7166 genes, 1.5%	3.91E-06	0.00%	0 ADE13, ADE8, ADE6, AI
116 of 7166 genes, 1.6%	5.76E-06	0.00%	0 ADE13, ADE8, ADE6, AI
8 of 7166 genes, 0.1%	1.77E-05	0.00%	0 PHO87, PHO89, PHO91
1897 of 7166 genes, 26.5%	1.81E-05	0.00%	0 RPE1, ADE13, ADE5,7, I
2651 of 7166 genes, 37.0%	2.77E-05	0.00%	0 ADE13, UTR1, TRP1, TK
140 of 7166 genes, 2.0%	2.96E-05	0.00%	0 ADE13, ADE8, ADE6, AI
144 of 7166 genes, 2.0%	3.78E-05	0.00%	0 ADE13, ADE8, ADE6, AI
3 of 7166 genes, 0.0%	4.39E-05	0.00%	0 BNA5, BNA2, BNA4
112 of 7166 genes, 1.6%	7.01E-05	0.00%	0 TRP2, TRP3, TRP1, ARC
29 of 7166 genes, 0.4%	0.00015	0.00%	0 PHO87, PHO89, PHO91

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2	4 of 7166 genes, 0.1%	0.00017	0.00%	0 ARO1, ARO3, ARO2
3	4 of 7166 genes, 0.1%	0.00017	0.00%	0 ARO1, ARO3, ARO2
4	4 of 7166 genes, 0.1%	0.00017	0.00%	0 PHO87, PHO91, PHO9C
5	4 of 7166 genes, 0.1%	0.00017	0.00%	0 PHO87, PHO91, PHO9C
6	4 of 7166 genes, 0.1%	0.00017	0.00%	0 PHO87, PHO91, PHO9C
7	13 of 7166 genes, 0.2%	0.00017	0.00%	0 RPE1, TKL2, RKI1, TKL1
8	13 of 7166 genes, 0.2%	0.00017	0.00%	0 RPE1, TKL2, RKI1, TKL1
9	14 of 7166 genes, 0.2%	0.00024	0.00%	0 PHO87, PHO91, PHO84
10	3611 of 7166 genes, 50.4%	0.00035	0.00%	0 ADE13, UTR1, TRP1, TK
11	63 of 7166 genes, 0.9%	0.00042	0.00%	0 CTP1, PHO87, PHO89, I
12	5 of 7166 genes, 0.1%	0.00043	0.00%	0 PHO87, PHO91, PHO9C
13	5 of 7166 genes, 0.1%	0.00043	0.00%	0 PHO87, PHO91, PHO9C
14	16 of 7166 genes, 0.2%	0.00044	0.00%	0 RPE1, TKL2, RKI1, TKL1
15	16 of 7166 genes, 0.2%	0.00044	0.00%	0 PHO87, PHO89, PHO91
16	3454 of 7166 genes, 48.2%	0.00046	0.00%	0 ADE13, UTR1, TRP1, TK
17	201 of 7166 genes, 2.8%	0.00063	0.00%	0 TRP2, TRP3, TRP1, ARC
18	201 of 7166 genes, 2.8%	0.00063	0.00%	0 TRP2, TRP3, TRP1, ARC
19	8 of 7166 genes, 0.1%	0.0024	0.00%	0 BNA5, BNA2, BNA4
20	9 of 7166 genes, 0.1%	0.00359	0.00%	0 PHO87, PHO91, PHO9C
21	5024 of 7166 genes, 70.1%	0.00417	0.02%	0.02 ADE13, UTR1, TRP1, TK
22	11 of 7166 genes, 0.2%	0.007	0.04%	0.04 PHO87, PHO91, PHO9C
23	102 of 7166 genes, 1.4%	0.00708	0.03%	0.04 GLN1, TRP5, TRP2, TRP
24	2 of 7166 genes, 0.0%	0.00732	0.03%	0.04 BNA5, BNA2
25	2 of 7166 genes, 0.0%	0.00732	0.03%	0.04 ADE13, ADE12
26	2 of 7166 genes, 0.0%	0.00732	0.03%	0.04 BNA6, BNA1
27	347 of 7166 genes, 4.8%	0.00826	0.03%	0.04 TRP2, TRP3, TRP1, ARC
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32	221 of 7166 genes, 3.1%	2.58E-36	0.00%	0 RPE1, ADE13, ADE5,7, I
33	226 of 7166 genes, 3.2%	5.13E-36	0.00%	0 RPE1, ADE13, ADE5,7, I
34	126 of 7166 genes, 1.8%	8.83E-35	0.00%	0 ADE13, ADE5,7, PRS1, I
35	129 of 7166 genes, 1.8%	1.68E-34	0.00%	0 ADE13, ADE5,7, PRS1, I
36	262 of 7166 genes, 3.7%	4.71E-34	0.00%	0 RPE1, ADE13, ADE5,7, I
37	770 of 7166 genes, 10.7%	9.92E-34	0.00%	0 ADE13, UTR1, TRP1, TK
38	398 of 7166 genes, 5.6%	1.33E-28	0.00%	0 RPE1, ADE13, ADE5,7, I
39	248 of 7166 genes, 3.5%	6.06E-27	0.00%	0 ADE13, ADE5,7, PRS1, I
40	686 of 7166 genes, 9.6%	1.11E-21	0.00%	0 RPE1, ADE13, ADE5,7, I
41	704 of 7166 genes, 9.8%	2.36E-21	0.00%	0 RPE1, ADE13, ADE5,7, I
42	982 of 7166 genes, 13.7%	3.42E-20	0.00%	0 ADE13, TRP2, ADE5,7, I
43	997 of 7166 genes, 13.9%	5.45E-20	0.00%	0 ADE13, TRP2, ADE5,7, I
44	1038 of 7166 genes, 14.5%	1.87E-19	0.00%	0 ADE13, TRP2, ADE5,7, I
45	164 of 7166 genes, 2.3%	1.15E-18	0.00%	0 RPE1, ADE13, PRS1, PR
46	16 of 7166 genes, 0.2%	3.20E-18	0.00%	0 TRP2, TRP3, TRP1, BNA
47	16 of 7166 genes, 0.2%	3.20E-18	0.00%	0 TRP2, TRP3, TRP1, BNA
48	16 of 7166 genes, 0.2%	3.20E-18	0.00%	0 TRP2, TRP3, TRP1, BNA
49	87 of 7166 genes, 1.2%	3.70E-18	0.00%	0 ADE13, ADE8, ADE6, AI
50	1282 of 7166 genes, 17.9%	3.86E-18	0.00%	0 ADE13, UTR1, TRP1, BN
51	11 of 7166 genes, 0.2%	5.90E-18	0.00%	0 ADE13, ADE8, ADE6, AI
52	96 of 7166 genes, 1.3%	1.79E-17	0.00%	0 ADE13, ADE8, ADE6, AI
53	8 of 7166 genes, 0.1%	2.76E-17	0.00%	0 ADE13, ADE8, ADE6, AI
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2	80 of 7166 genes, 1.1%	6.96E-17	0.00%	0 RPE1, TKL2, UTR1, BNA
3	81 of 7166 genes, 1.1%	8.39E-17	0.00%	0 RPE1, TKL2, UTR1, BNA
4	91 of 7166 genes, 1.3%	4.77E-16	0.00%	0 ADE13, ADE8, ADE6, AI
5	92 of 7166 genes, 1.3%	5.62E-16	0.00%	0 RPE1, TKL2, UTR1, BNA
6	24 of 7166 genes, 0.3%	7.64E-16	0.00%	0 TRP2, TRP3, TRP1, BNA
7	96 of 7166 genes, 1.3%	1.05E-15	0.00%	0 RPE1, TKL2, UTR1, BNA
8	10 of 7166 genes, 0.1%	1.23E-15	0.00%	0 ADE13, ADE8, ADE6, AI
9	1978 of 7166 genes, 27.6%	4.27E-15	0.00%	0 ADE13, UTR1, TRP1, TK
10	1991 of 7166 genes, 27.8%	5.32E-15	0.00%	0 ADE13, UTR1, TRP1, TK
11	2260 of 7166 genes, 31.5%	9.45E-15	0.00%	0 ADE13, UTR1, TRP1, TK
12	2045 of 7166 genes, 28.5%	1.30E-14	0.00%	0 ADE13, UTR1, TRP1, TK
13	148 of 7166 genes, 2.1%	1.56E-14	0.00%	0 ADE13, ADE8, ADE6, AI
14	35 of 7166 genes, 0.5%	6.89E-14	0.00%	0 TRP2, TRP3, TRP1, BNA
15	164 of 7166 genes, 2.3%	7.49E-14	0.00%	0 ADE13, ADE8, ADE6, AI
16	14 of 7166 genes, 0.2%	8.13E-14	0.00%	0 BNA6, BNA4, BNA5, BN
17	38 of 7166 genes, 0.5%	1.75E-13	0.00%	0 TRP2, TRP3, TRP1, BNA
18	39 of 7166 genes, 0.5%	2.35E-13	0.00%	0 TRP2, TRP3, TRP1, BNA
19	58 of 7166 genes, 0.8%	2.90E-13	0.00%	0 UTR1, BNA6, BNA4, YEI
20	911 of 7166 genes, 12.7%	7.04E-13	0.00%	0 ADE13, ADE5,7, PRS1, I
21	348 of 7166 genes, 4.9%	9.38E-13	0.00%	0 RPE1, ADE13, PRS1, PR
22	45 of 7166 genes, 0.6%	1.15E-12	0.00%	0 UTR1, BNA6, BNA4, YEI
23	1753 of 7166 genes, 24.5%	1.41E-12	0.00%	0 ADE13, TRP2, ADE5,7, I
24	46 of 7166 genes, 0.6%	1.47E-12	0.00%	0 UTR1, BNA6, BNA4, YEI
25	172 of 7166 genes, 2.4%	4.66E-12	0.00%	0 RPE1, TKL2, UTR1, BNA
26	7 of 7166 genes, 0.1%	1.13E-11	0.00%	0 BNA5, BNA2, BNA6, BN
27	26 of 7166 genes, 0.4%	4.05E-11	0.00%	0 BNA6, BNA4, BNA5, BN
28	2651 of 7166 genes, 37.0%	7.42E-11	0.00%	0 ADE13, UTR1, TRP1, TK
29	2250 of 7166 genes, 31.4%	1.50E-10	0.00%	0 ADE13, UTR1, TRP1, BN
30	2277 of 7166 genes, 31.8%	2.16E-10	0.00%	0 ADE13, UTR1, TRP1, BN
31	2284 of 7166 genes, 31.9%	2.37E-10	0.00%	0 ADE13, UTR1, TRP1, BN
32	5 of 7166 genes, 0.1%	3.76E-10	0.00%	0 PRS4, PRS3, PRS1, PRS
33	5 of 7166 genes, 0.1%	3.76E-10	0.00%	0 BNA5, BNA2, BNA6, BN
34	5 of 7166 genes, 0.1%	3.76E-10	0.00%	0 PRS4, PRS3, PRS1, PRS
35	237 of 7166 genes, 3.3%	3.99E-10	0.00%	0 ADE13, ADE8, ADE6, AI
36	243 of 7166 genes, 3.4%	5.62E-10	0.00%	0 RPE1, TKL2, UTR1, BNA
37	157 of 7166 genes, 2.2%	1.00E-09	0.00%	0 TRP2, TRP3, TRP1, BNA
38	63 of 7166 genes, 0.9%	2.12E-09	0.00%	0 ADE13, ADE8, ADE6, AI
39	63 of 7166 genes, 0.9%	2.12E-09	0.00%	0 ADE13, ADE8, ADE6, AI
40	6 of 7166 genes, 0.1%	2.25E-09	0.00%	0 TRP5, TRP2, TRP3, TRP
41	6 of 7166 genes, 0.1%	2.25E-09	0.00%	0 TRP5, TRP2, TRP3, TRP
42	6 of 7166 genes, 0.1%	2.25E-09	0.00%	0 TRP5, TRP2, TRP3, TRP
43	1897 of 7166 genes, 26.5%	2.65E-09	0.00%	0 RPE1, ADE13, ADE5,7, I
44	3611 of 7166 genes, 50.4%	2.77E-09	0.00%	0 ADE13, UTR1, TRP1, TK
45	65 of 7166 genes, 0.9%	2.85E-09	0.00%	0 ADE13, ADE8, ADE6, AI
46	70 of 7166 genes, 1.0%	5.71E-09	0.00%	0 ADE13, ADE8, ADE6, AI
47	140 of 7166 genes, 2.0%	6.62E-09	0.00%	0 UTR1, BNA6, BNA4, YEI
48	3795 of 7166 genes, 53.0%	1.67E-08	0.00%	0 ADE13, UTR1, TRP1, TK
49	81 of 7166 genes, 1.1%	2.20E-08	0.00%	0 ADE13, ADE8, ADE6, AI
50	3454 of 7166 genes, 48.2%	2.22E-08	0.00%	0 ADE13, UTR1, TRP1, TK
51	3854 of 7166 genes, 53.8%	2.92E-08	0.00%	0 ADE13, UTR1, TRP1, TK
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2	119 of 7166 genes, 1.7%	3.02E-08	0.00%	0 UTR1, BNA6, BNA4, YEI
3	85 of 7166 genes, 1.2%	3.43E-08	0.00%	0 ADE13, ADE8, ADE6, AI
4	3950 of 7166 genes, 55.1%	7.11E-08	0.00%	0 ADE13, UTR1, TRP1, TK
5	21 of 7166 genes, 0.3%	8.37E-08	0.00%	0 YEF1, RPE1, TKL2, RKI1
6	10 of 7166 genes, 0.1%	9.31E-08	0.00%	0 TRP5, TRP2, TRP3, TRP
7	10 of 7166 genes, 0.1%	9.31E-08	0.00%	0 TRP5, TRP2, TRP3, TRP
8	231 of 7166 genes, 3.2%	9.38E-08	0.00%	0 TRP2, TRP3, TRP1, BNA
9	109 of 7166 genes, 1.5%	3.27E-07	0.00%	0 ADE13, ADE8, ADE6, AI
10	109 of 7166 genes, 1.5%	3.27E-07	0.00%	0 ADE13, ADE8, ADE6, AI
11	111 of 7166 genes, 1.5%	3.85E-07	0.00%	0 ADE13, ADE8, ADE6, AI
12	116 of 7166 genes, 1.6%	5.72E-07	0.00%	0 ADE13, ADE8, ADE6, AI
13	140 of 7166 genes, 2.0%	3.02E-06	0.00%	0 ADE13, ADE8, ADE6, AI
14	144 of 7166 genes, 2.0%	3.87E-06	0.00%	0 ADE13, ADE8, ADE6, AI
15	397 of 7166 genes, 5.5%	4.30E-06	0.00%	0 TRP2, TRP3, TRP1, FUN
16	412 of 7166 genes, 5.7%	6.70E-06	0.00%	0 TRP2, TRP3, TRP1, FUN
17	413 of 7166 genes, 5.8%	6.89E-06	0.00%	0 TRP2, TRP3, TRP1, FUN
18	22 of 7166 genes, 0.3%	9.32E-06	0.00%	0 TRP5, TRP2, TRP3, TRP
19	3 of 7166 genes, 0.0%	1.82E-05	0.00%	0 BNA5, BNA2, BNA4
20	13 of 7166 genes, 0.2%	5.83E-05	0.00%	0 RPE1, TKL2, RKI1, TKL1
21	13 of 7166 genes, 0.2%	5.83E-05	0.00%	0 RPE1, TKL2, RKI1, TKL1
22	16 of 7166 genes, 0.2%	0.00014	0.00%	0 RPE1, TKL2, RKI1, TKL1
23	5024 of 7166 genes, 70.1%	0.00042	0.00%	0 ADE13, UTR1, TRP1, TK
24	8 of 7166 genes, 0.1%	0.001	0.00%	0 BNA5, BNA2, BNA4
25	102 of 7166 genes, 1.4%	0.00155	0.00%	0 GLN1, TRP5, TRP2, TRP
26	112 of 7166 genes, 1.6%	0.00265	0.00%	0 GLN1, TRP5, TRP2, TRP
27	2 of 7166 genes, 0.0%	0.00385	0.00%	0 BNA5, BNA2
28	2 of 7166 genes, 0.0%	0.00385	0.00%	0 ADE13, ADE12
29	2 of 7166 genes, 0.0%	0.00385	0.00%	0 BNA6, BNA1
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7 IA2, BNA7, NMA1, BNA1, QNS1
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23 5, PRS2
24 IA4, BNA1
25 5, PRS2
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28 :L1, BNA4, TRP5, ARO1, TRP4, TKL2, ADE17, ADE6, ADE8, GND1, TRP3, PHO91, YEF1, ADE1, NMA1, ADE2,
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35 OL3, SOL4
36 DE17, ADE16, ADE12, ADE4, ADE1, ADE2
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1 F1, BNA5, BNA2, BNA7, NMA1, BNA1, QNS1
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NA2, BNA7, SOL3, ARO2, GND2, PHO87, PRS5, SOL4, ADE12, FUM1, GLN1, PRS4, ZWF1, PHO84

.2, SOL4, PRS4, ZWF1, PHO84

2, GND2, PRS5, ADE12, SOL4, PRS4, ZWF1

2, GND2, PRS5, ADE12, SOL4, PRS4, ZWF1

2, GND2, PRS5, ADE12, SOL4, GLN1, PRS4, ZWF1

5, ADE12, SOL4, PRS4, ZWF1

NA2, BNA7, SOL3, AGC1, ARO2, GND2, PHO87, PRS5, SOL4, ADE12, FUM1, GLN1, PRS4, ZWF1, PHO84

NA2, BNA7, SOL3, AGC1, ARO2, GND2, PHO87, PRS5, SOL4, ADE12, FUM1, GLN1, PRS4, ZWF1, PHO84

NA2, BNA7, SOL3, ARO2, GND2, PHO87, PRS5, SOL4, ADE12, FUM1, GLN1, PRS4, ZWF1, PHO84

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LN1, PRS4

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RS4
1, ARO2, GND2, PRS5, ADE12, SOL4, GLN1, PRS4, ZWF1

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NA2, BNA7, SOL3, AGC1, ARO2, GND2, PHO87, PRS5, SOL4, ADE12, FUM1, GLN1, PRS4, ZWF1, PHO84

NA2, BNA7, SOL3, ARO2, GND2, PHO87, PRS5, SOL4, ADE12, FUM1, GLN1, PRS4, ZWF1, PHO84

.2, SOL4, PRS4, ZWF1, PHO84

2, GND2, PRS5, ADE12, SOL4, PRS4, ZWF1

2, GND2, PRS5, ADE12, SOL4, PRS4, ZWF1

2, GND2, PRS5, ADE12, SOL4, GLN1, PRS4, ZWF1

5, ADE12, SOL4, PRS4, ZWF1

NA2, BNA7, SOL3, ARO2, GND2, PHO87, PRS5, SOL4, ADE12, FUM1, GLN1, PRS4, ZWF1, PHO84

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NA2, BNA7, SOL3, ARO2, GND2, PHO87, PRS5, SOL4, ADE12, FUM1, GLN1, PRS4, ZWF1, PHO84

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NA7, ARO2, PHO87, PRS5, ADE12, FUM1, GLN1, PRS4, PHO84

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30 NA7, ARO2, PHO87, PRS5, ADE12, FUM1, GLN1, PRS4, PHO84
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17 l2, GLN1, PRS4
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1						
2	Model Genes				Y7.6	deletant growth
3	Systematic name	Essentiality	non-SGD evidence	PMID	YAR015W	0
4	Q0045	viable			YBL033C	0
5	Q0080	viable			YBR115C	0
6	Q0085	viable			YBR126C	0
7	Q0105	viable			YBR159W	0
8	Q0130	viable			YBR166C	0
9	Q0250	viable			YBR248C	0
10	Q0275	viable			YCL018W	0
11	YAL012W	inviable			YCL030C	0
12	YAL022C	viable			YCR053W	0
13	YAL023C	viable			YDR007W	0
14	YAL038W	inviable			YDR074W	0
15	YAL039C	viable			YDR127W	0
16	YAL044C	viable			YDR158W	0
17	YAL054C	viable			YDR234W	0
18	YAL060W	viable			YDR354W	0
19	YAL062W	viable			YDR408C	0
20	YAR015W	viable			YEL021W	0
21	YAR035W	viable			YER014W	0
22	YAR071W	viable	9364749		YER026C	0
23	YBL011W	viable			YER052C	0
24	YBL013W	viable			YER055C	0
25	YBL015W	viable			YER069W	0
26	YBL030C	inviable			YER090W	0
27	YBL033C	viable			YER091C	0
28	YBL039C	viable			YFR025C	0
29	YBL042C	viable			YFR030W	0
30	YBL045C	viable			YGL009C	0
31	YBL064C	viable			YGL012W	0
32	YBL068W	viable			YGL026C	0
33	YBL076C	inviable			YGL148W	0
34	YBL098W	viable			YGL154C	0
35	YBL099W	viable			YGL234W	0
36	YBR002C	inviable			YGR061C	0
37	YBR003W	viable			YGR204W	0
38	YBR004C	inviable			YHR018C	0
39	YBR006W	viable			YHR025W	0
40	YBR011C	inviable			YHR208W	0
41	YBR018C	viable			YIL020C	0
42	YBR019C	viable			YIL094C	0
43	YBR020W	viable			YIL116W	0
44	YBR021W	viable			YIR034C	0
45	YBR023C	viable			YJL088W	0
46	YBR026C	viable			YJL130C	0
47	YBR029C	inviable			YJL153C	0
48	YBR034C	viable			YJR073C	0
49	YBR035C	viable			YJR137C	0
50	YBR036C	viable			YJR139C	0
51	YBR038W	inviable			YJR148W	0
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2	YBR039W	viable		YKL001C	0
3	YBR041W	viable		YKL067W	0
4	YBR042C	viable		YKL211C	0
5	YBR058C-A	viable		YKL216W	0
6	YBR068C	viable		YLR303W	0
7	YBR069C	viable		YLR304C	0
8	YBR084W	viable		YLR420W	0
9	YBR085W	viable		YML008C	0
10	YBR092C	viable		YMR062C	0
11	YBR093C	viable		YMR108W	0
12	YBR097W	viable		YMR202W	0
13	YBR110W	inviable		YMR217W	0
14	YBR115C	viable		YMR300C	0
15	YBR117C	viable		YMR319C	0
16	YBR121C	inviable		YNL220W	0
17	YBR126C	viable		YNL277W	0
18	YBR127C	viable		YNL316C	0
19	YBR132C	viable		YNR050C	0
20	YBR145W	viable		YOL058W	0
21	YBR149W	viable		YOL140W	0
22	YBR153W	inviable		YOL143C	0
23	YBR159W	viable		YOR128C	0
24	YBR161W	viable		YOR130C	0
25	YBR166C	viable		YOR202W	0
26	YBR176W	viable		YPL172C	0
27	YBR180W	viable		YPR060C	0
28	YBR183W	viable		YPR167C	0
29	YBR192W	inviable		YBL076C	0
30	YBR196C	inviable		YBR029C	0
31	YBR199W	viable		YBR153W	0
32	YBR204C	viable		YBR256C	0
33	YBR205W	viable		YBR265W	0
34	YBR207W	viable		YDL015C	0
35	YBR208C	viable		YDL055C	0
36	YBR213W	viable		YDL103C	0
37	YBR218C	viable		YDL141W	0
38	YBR221C	viable		YDL205C	0
39	YBR244W	viable		YDR037W	0
40	YBR248C	viable		YDR044W	0
41	YBR249C	viable		YDR047W	0
42	YBR252W	inviable		YDR062W	0
43	YBR256C	inviable		YDR226W	0
44	YBR263W	viable		YDR232W	0
45	YBR265W	inviable		YDR341C	0
46	YBR291C	viable		YDR353W	0
47	YBR293W	viable		YDR367W	0
48	YBR294W	viable		YDR376W	0
49	YBR296C	viable		YDR454C	0
50	YBR298C	viable		YDR487C	0
51	YBR299W	viable		YEL058W	0
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2	YCL004W	inviable		YER003C	0
3	YCL009C	viable		YER023W	0
4	YCL017C	inviable		YER043C	0
5	YCL018W	viable		YFL017C	0
6	YCL025C	viable		YFL022C	0
7	YCL030C	viable		YFL045C	0
8	YCL035C	viable		YGL001C	0
9	YCL038C	viable		YGL040C	0
10	YCL040W	viable		YGL055W	0
11	YCL050C	viable		YGL245W	0
12	YCL052C	inviable		YGR060W	0
13	YCL064C	viable		YGR094W	0
14	YCL069W	viable		YGR175C	0
15	YCR005C	viable		YGR185C	0
16	YCR010C	viable		YGR264C	0
17	YCR012W	inviable		YHR007C	0
18	YCR024C	viable		YHR019C	0
19	YCR024C-A	viable		YHR020W	0
20	YCR028C	viable		YHR042W	0
21	YCR034W	viable		YHR072W	0
22	YCR036W	viable		YHR190W	0
23	YCR037C	viable		YIL078W	0
24	YCR048W	viable		YJL097W	0
25	YCR053W	viable		YJL167W	0
26	YCR075C	viable		YJR016C	0
27	YCR083W	viable		YKL004W	0
28	YCR098C	viable		YKL024C	0
29	YCR105W	viable		YKL104C	0
30	YDL004W	inviable		YKL182W	0
31	YDL015C	inviable		YLL018C	0
32	YDL022W	viable		YLR060W	0
33	YDL042C	viable		YLR100W	0
34	YDL045C	inviable		YLR355C	0
35	YDL052C	viable		YLR359W	0
36	YDL055C	inviable		YML126C	0
37	YDL066W	viable		YMR208W	0
38	YDL067C	inviable		YMR220W	0
39	YDL078C	viable		YMR296C	0
40	YDL080C	viable		YNL247W	0
41	YDL085W	viable		YNL280C	0
42	YDL090C	viable		YNR016C	0
43	YDL093W	viable		YNR043W	0
44	YDL095W	viable		YOL066C	0
45	YDL100C	viable		YOL097C	0
46	YDL103C	inviable		YOR074C	0
47	YDL120W	inviable		YOR095C	0
48	YDL131W	viable		YOR168W	0
49	YDL141W	inviable		YOR176W	0
50	YDL142C	viable		YOR236W	0
51	YDL168W	viable		YOR278W	0
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2	YDL171C	viable		YOR335C	0
3	YDL174C	viable		YPL028W	0
4	YDL178W	viable		YPL117C	0
5	YDL182W	viable		YPL160W	0
6	YDL185W	viable		YPL231W	0
7	YDL198C	viable		YPL252C	0
8	YDL205C	inviable		YPR033C	0
9	YDL210W	viable		YPR035W	0
10	YDL215C	viable		YPR113W	0
11	YDL238C	viable		YPR183W	0
12	YDL245C	viable	10477308	YAL012W	1
13	YDL247W	viable	28087672	YAL038W	1
14	YDR001C	viable		YBL030C	1
15	YDR007W	viable		YBR002C	1
16	YDR017C	viable		YBR004C	1
17	YDR019C	viable		YBR011C	1
18	YDR023W	inviable		YBR038W	1
19	YDR035W	viable		YBR110W	1
20	YDR037W	inviable		YBR121C	1
21	YDR044W	inviable		YBR192W	1
22	YDR046C	viable		YBR196C	0.9896
23	YDR047W	inviable		YBR252W	1
24	YDR050C	inviable		YCL004W	1
25	YDR058C	viable		YCL052C	1
26	YDR062W	inviable		YCR012W	0.8988
27	YDR072C	viable		YDL004W	0.3945
28	YDR074W	viable		YDL045C	1
29	YDR098C	viable		YDL067C	0.2063
30	YDR127W	viable		YDR023W	1
31	YDR135C	viable		YDR050C	0.972
32	YDR147W	viable		YDR196C	1
33	YDR148C	viable		YDR208W	1
34	YDR158W	viable		YDR236C	1
35	YDR173C	viable		YDR302W	1
36	YDR178W	viable		YDR373W	1
37	YDR191W	viable		YDR531W	1
38	YDR196C	inviable		YER005W	0.9998
39	YDR204W	viable		YER060W	1
40	YDR208W	inviable		YER070W	1
41	YDR226W	inviable		YGL008C	1
42	YDR232W	inviable		YGL084C	1
43	YDR234W	viable		YGL142C	1
44	YDR236C	inviable		YGL225W	1
45	YDR256C	viable		YGR065C	1
46	YDR261C	viable		YGR155W	1
47	YDR267C	inviable		YGR191W	1
48	YDR268W	viable		YGR244C	1
49	YDR270W	viable		YGR267C	1
50	YDR272W	viable		YGR277C	1
51	YDR284C	viable		YHR068W	1
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2	YDR287W	viable		YHR074W	1
3	YDR294C	viable		YHR128W	1
4	YDR297W	viable		YIL083C	1
5	YDR298C	viable		YJL005W	1
6	YDR300C	viable		YJL026W	1
7	YDR302W	inviable		YJL091C	1
8	YDR305C	viable		YJL198W	1
9	YDR315C	viable		YJR013W	1
10	YDR321W	viable		YJR049C	1
11	YDR322C-A	viable		YJR057W	1
12	YDR335W	viable		YJR095W	0.9998
13	YDR341C	inviable		YKL019W	1
14	YDR342C	viable	10477308	YKL035W	1
15	YDR343C	viable	10477308	YKL060C	0.9715
16	YDR345C	viable		YKL088W	1
17	YDR353W	inviable		YKL141W	0.9941
18	YDR354W	viable		YKL152C	0.9632
19	YDR367W	inviable		YKL165C	1
20	YDR368W	viable		YKL192C	1
21	YDR373W	inviable		YLL031C	1
22	YDR376W	inviable		YLR027C	1
23	YDR377W	viable		YLR153C	1
24	YDR380W	viable		YLR240W	1
25	YDR384C	viable		YLR305C	1
26	YDR399W	viable		YMR013C	1
27	YDR400W	viable		YMR113W	1
28	YDR402C	viable		YMR281W	1
29	YDR403W	viable		YMR298W	1
30	YDR408C	viable		YNL241C	0.9999
31	YDR428C	viable		YNL256W	1
32	YDR453C	viable		YNL267W	1
33	YDR454C	inviable		YOR143C	1
34	YDR481C	viable		YPL268W	1
35	YDR483W	viable		Q0045	0.2063
36	YDR487C	inviable		Q0080	0.3945
37	YDR497C	viable		Q0085	0.3945
38	YDR502C	viable		Q0105	0.2076
39	YDR503C	viable		Q0130	0.3945
40	YDR508C	viable		Q0250	0.2063
41	YDR513W	viable		Q0275	0.2063
42	YDR529C	viable		YAL022C	1
43	YDR530C	viable		YAL023C	1
44	YDR531W	inviable		YAL044C	0.987
45	YDR534C	viable		YAL054C	1
46	YDR536W	viable		YAL060W	1
47	YEL006W	viable		YAL062W	1
48	YEL017C-A	viable		YAR035W	1
49	YEL021W	viable		YAR071W	1
50	YEL024W	viable		YBL011W	1
51	YEL027W	viable		YBL013W	1
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2	YEL029C	viable		YBL015W	1
3	YEL038W	viable		YBL039C	1
4	YEL039C	viable		YBL042C	1
5	YEL041W	viable		YBL045C	0.2076
6	YEL042W	viable		YBL064C	1
7	YEL046C	viable		YBL068W	1
8	YEL047C	viable		YBL098W	1
9	YEL051W	viable		YBL099W	0.3945
10	YEL058W	inviable		YBR003W	1
11	YEL063C	viable		YBR006W	1
12	YEL065W	viable		YBR018C	1
13	YEL069C	viable	10477308	YBR019C	1
14	YEL071W	viable		YBR020W	1
15	YER003C	inviable		YBR021W	1
16	YER005W	inviable		YBR023C	1
17	YER014W	viable		YBR026C	1
18	YER015W	viable		YBR034C	1
19	YER019W	viable		YBR035C	1
20	YER023W	inviable		YBR036C	1
21	YER024W	viable		YBR039W	0.3945
22	YER026C	viable		YBR041W	1
23	YER037W	viable		YBR042C	1
24	YER043C	inviable		YBR058C-A	1
25	YER048W-A	inviable		YBR068C	1
26	YER052C	viable		YBR069C	1
27	YER053C	viable		YBR084W	1
28	YER055C	viable		YBR085W	1
29	YER056C	viable		YBR092C	1
30	YER060W	inviable		YBR093C	1
31	YER060W-A	viable		YBR097W	1
32	YER061C	viable		YBR117C	1
33	YER062C	viable		YBR127C	1
34	YER065C	viable		YBR132C	1
35	YER069W	viable		YBR145W	1
36	YER070W	inviable		YBR149W	1
37	YER073W	viable		YBR161W	1
38	YER081W	viable		YBR176W	1
39	YER086W	viable		YBR180W	1
40	YER090W	viable		YBR183W	1
41	YER091C	viable		YBR199W	1
42	YER099C	viable		YBR204C	1
43	YER119C	viable		YBR205W	1
44	YER145C	viable		YBR208C	1
45	YER152C	viable		YBR213W	1
46	YER170W	viable		YBR218C	1
47	YER174C	viable		YBR221C	0.9897
48	YER175C	viable		YBR244W	1
49	YER178W	viable		YBR249C	1
50	YER183C	viable		YBR263W	0.987
51	YFL001W	viable		YBR291C	0.9994
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2	YFL011W	viable		YBR293W	1
3	YFL017C	inviable		YBR294W	1
4	YFL018C	viable		YBR296C	1
5	YFL022C	inviable		YBR298C	1
6	YFL030W	viable		YBR299W	1
7	YFL041W	viable		YCL009C	1
8	YFL045C	inviable		YCL025C	1
9	YFL053W	viable		YCL035C	1
10	YFL055W	viable		YCL038C	1
11	YFR015C	viable		YCL040W	1
12	YFR019W	viable		YCL050C	0.9998
13	YFR025C	viable		YCL064C	1
14	YFR030W	viable		YCL069W	1
15	YFR033C	viable		YCR005C	1
16	YFR047C	viable		YCR010C	1
17	YFR053C	viable		YCR024C	1
18	YGL001C	inviable		YCR024C-A	1
19	YGL008C	inviable		YCR028C	1
20	YGL009C	viable		YCR034W	1
21	YGL012W	viable		YCR036W	1
22	YGL018C	inviable		YCR037C	1
23	YGL026C	viable		YCR048W	1
24	YGL037C	viable		YCR075C	1
25	YGL040C	inviable		YCR083W	1
26	YGL055W	inviable		YCR098C	1
27	YGL062W	viable		YCR105W	1
28	YGL063W	viable		YDL022W	1
29	YGL067W	viable		YDL042C	1
30	YGL071W	viable		YDL052C	1
31	YGL077C	viable		YDL066W	0.9986
32	YGL080W	viable		YDL078C	1
33	YGL084C	inviable		YDL080C	1
34	YGL091C	inviable		YDL085W	1
35	YGL119W	viable		YDL090C	1
36	YGL125W	viable		YDL093W	1
37	YGL142C	inviable		YDL095W	1
38	YGL148W	viable		YDL100C	1
39	YGL154C	viable		YDL131W	1
40	YGL184C	viable		YDL142C	1
41	YGL186C	viable		YDL168W	1
42	YGL187C	viable		YDL171C	1
43	YGL191W	viable		YDL174C	1
44	YGL202W	viable		YDL178W	1
45	YGL205W	viable		YDL182W	1
46	YGL224C	viable		YDL185W	1
47	YGL225W	inviable		YDL198C	1
48	YGL234W	viable		YDL210W	1
49	YGL245W	inviable		YDL215C	1
50	YGL248W	viable		YDL238C	1
51	YGL253W	viable		YDL245C	1
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2	YGL256W	viable		YDL247W	1
3	YGR007W	viable		YDR001C	1
4	YGR010W	viable		YDR017C	1
5	YGR019W	viable		YDR019C	0.987
6	YGR020C	viable		YDR035W	0.9994
7	YGR029W	inviable		YDR046C	1
8	YGR032W	viable		YDR058C	1
9	YGR055W	viable		YDR072C	1
10	YGR060W	inviable		YDR098C	1
11	YGR061C	viable		YDR135C	1
12	YGR065C	inviable		YDR147W	1
13	YGR087C	viable		YDR148C	1
14	YGR088W	viable		YDR173C	1
15	YGR094W	inviable		YDR178W	0.9941
16	YGR096W	viable		YDR191W	1
17	YGR110W	viable		YDR204W	1
18	YGR121C	viable		YDR256C	1
19	YGR124W	viable		YDR261C	1
20	YGR138C	viable		YDR268W	1
21	YGR143W	viable		YDR272W	1
22	YGR155W	inviable		YDR284C	1
23	YGR157W	viable		YDR287W	1
24	YGR170W	viable		YDR294C	1
25	YGR171C	viable		YDR297W	1
26	YGR175C	inviable		YDR298C	0.3945
27	YGR177C	viable		YDR300C	1
28	YGR180C	viable		YDR305C	1
29	YGR183C	viable		YDR315C	1
30	YGR185C	inviable		YDR321W	1
31	YGR191W	inviable		YDR322C-A	1
32	YGR192C	viable		YDR342C	1
33	YGR193C	viable		YDR343C	1
34	YGR194C	viable		YDR345C	1
35	YGR202C	viable		YDR368W	1
36	YGR204W	viable		YDR377W	0.3945
37	YGR208W	viable		YDR380W	1
38	YGR209C	viable		YDR384C	1
39	YGR240C	viable		YDR399W	1
40	YGR243W	viable		YDR400W	1
41	YGR244C	inviable		YDR402C	1
42	YGR247W	viable		YDR403W	1
43	YGR248W	viable		YDR428C	1
44	YGR254W	viable		YDR453C	1
45	YGR255C	viable		YDR481C	1
46	YGR256W	viable		YDR483W	1
47	YGR260W	viable		YDR497C	1
48	YGR264C	inviable		YDR502C	1
49	YGR267C	inviable		YDR503C	1
50	YGR277C	inviable		YDR508C	1
51	YGR282C	viable		YDR513W	1
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2	YGR286C	viable		YDR529C	0.2076
3	YGR287C	viable		YDR530C	1
4	YGR289C	viable		YDR536W	1
5	YGR292W	viable		YEL006W	1
6	YHL003C	viable		YEL017C-A	1
7	YHL011C	viable		YEL024W	0.2076
8	YHL016C	viable		YEL027W	1
9	YHL032C	viable		YEL029C	1
10	YHL036W	viable		YEL038W	1
11	YHL040C	viable		YEL039C	1
12	YHL047C	viable		YEL041W	1
13	YHR001W-A	viable		YEL042W	1
14	YHR002W	viable		YEL046C	1
15	YHR007C	inviable		YEL047C	1
16	YHR011W	viable		YEL051W	1
17	YHR018C	viable		YEL063C	1
18	YHR019C	inviable		YEL069C	1
19	YHR020W	inviable		YEL071W	1
20	YHR025W	viable		YER015W	1
21	YHR026W	viable		YER019W	1
22	YHR037W	viable		YER024W	1
23	YHR039C-A	viable		YER037W	1
24	YHR042W	inviable		YER053C	1
25	YHR046C	viable		YER056C	1
26	YHR051W	viable		YER060W-1	1
27	YHR063C	viable	19266201	YER061C	1
28	YHR067W	viable		YER062C	1
29	YHR068W	inviable		YER065C	1
30	YHR072W	inviable		YER073W	1
31	YHR074W	inviable		YER081W	1
32	YHR091C	viable		YER086W	1
33	YHR092C	viable		YER099C	1
34	YHR094C	viable		YER119C	1
35	YHR096C	viable		YER152C	1
36	YHR100C	viable		YER170W	1
37	YHR104W	viable		YER174C	1
38	YHR106W	viable		YER175C	1
39	YHR122W	inviable		YER178W	0.9897
40	YHR123W	viable		YER183C	1
41	YHR128W	inviable		YFL001W	1
42	YHR137W	viable		YFL011W	1
43	YHR144C	viable		YFL018C	0.9619
44	YHR162W	viable		YFL030W	1
45	YHR163W	viable		YFL053W	1
46	YHR174W	viable		YFL055W	1
47	YHR183W	viable		YFR015C	1
48	YHR190W	inviable		YFR019W	1
49	YHR208W	viable		YFR033C	0.2076
50	YHR216W	viable		YFR047C	1
51	YIL002C	viable		YFR053C	1
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2	YIL003W	inviable		YGL037C	1
3	YIL006W	viable		YGL062W	1
4	YIL009W	viable		YGL063W	1
5	YIL010W	viable		YGL067W	1
6	YIL013C	viable		YGL077C	1
7	YIL020C	viable		YGL080W	1
8	YIL053W	viable		YGL119W	1
9	YIL066C	viable		YGL125W	1
10	YIL074C	viable		YGL184C	1
11	YIL078W	inviable		YGL186C	1
12	YIL083C	inviable		YGL187C	0.2063
13	YIL094C	viable		YGL191W	0.2063
14	YIL099W	viable		YGL202W	0.9981
15	YIL107C	viable		YGL205W	1
16	YIL111W	viable		YGL224C	1
17	YIL116W	viable		YGL248W	1
18	YIL124W	viable		YGL253W	1
19	YIL125W	viable		YGL256W	1
20	YIL128W	viable		YGR007W	1
21	YIL134W	viable		YGR010W	1
22	YIL145C	viable		YGR019W	1
23	YIL155C	viable		YGR020C	1
24	YIL160C	viable		YGR032W	1
25	YIL162W	viable		YGR055W	1
26	YIL172C	viable	20562106	YGR087C	1
27	YIR027C	viable		YGR088W	1
28	YIR028W	viable		YGR096W	1
29	YIR029W	viable		YGR110W	1
30	YIR031C	viable		YGR121C	1
31	YIR032C	viable		YGR124W	1
32	YIR034C	viable		YGR138C	1
33	YIR037W	viable		YGR143W	1
34	YJL005W	inviable		YGR157W	1
35	YJL026W	inviable		YGR170W	1
36	YJL045W	viable		YGR171C	1
37	YJL052W	viable		YGR177C	1
38	YJL060W	viable		YGR180C	1
39	YJL068C	viable		YGR183C	0.2076
40	YJL071W	viable		YGR192C	1
41	YJL088W	viable		YGR193C	0.9897
42	YJL091C	inviable		YGR194C	1
43	YJL097W	inviable		YGR202C	1
44	YJL100W	viable		YGR208W	0.9852
45	YJL101C	viable		YGR209C	1
46	YJL121C	viable		YGR240C	0.9715
47	YJL129C	viable		YGR243W	1
48	YJL130C	viable		YGR247W	1
49	YJL133W	viable		YGR248W	1
50	YJL134W	viable		YGR254W	1
51	YJL137C	viable		YGR255C	1
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2	YJL139C	viable			YGR256W	1
3	YJL153C	viable			YGR260W	1
4	YJL155C	viable			YGR282C	1
5	YJL166W	viable			YGR286C	1
6	YJL167W	inviable			YGR287C	1
7	YJL196C	viable			YGR289C	1
8	YJL198W	inviable			YGR292W	1
9	YJL212C	viable			YHL003C	1
10	YJL214W	viable			YHL011C	1
11	YJL216C	viable			YHL016C	1
12						
13	YJL219W	viable	10477308		YHL032C	1
14	YJL221C	viable	20562106		YHL036W	1
15	YJR001W	viable			YHR001W-	0.2076
16	YJR009C	viable			YHR002W	0.9994
17	YJR010W	viable			YHR011W	1
18	YJR013W	inviable			YHR026W	1
19	YJR016C	inviable			YHR037W	1
20	YJR019C	viable			YHR039C-A	1
21	YJR025C	viable			YHR046C	1
22	YJR045C	inviable			YHR051W	0.2063
23	YJR048W	viable			YHR063C	1
24	YJR049C	inviable			YHR067W	1
25	YJR057W	inviable			YHR091C	1
26	YJR073C	viable			YHR092C	1
27	YJR077C	viable			YHR094C	1
28	YJR078W	viable			YHR096C	1
29	YJR095W	inviable			YHR100C	1
30	YJR103W	viable			YHR104W	1
31	YJR105W	viable			YHR106W	1
32	YJR109C	viable			YHR123W	1
33	YJR110W	viable			YHR137W	0.9988
34	YJR121W	viable			YHR144C	1
35	YJR122W	viable			YHR162W	1
36	YJR130C	viable			YHR163W	1
37	YJR133W	viable			YHR174W	1
38	YJR137C	viable			YHR183W	1
39	YJR139C	viable			YHR216W	1
40	YJR143C	viable			YIL002C	1
41	YJR148W	viable			YIL006W	1
42	YJR152W	viable			YIL009W	1
43	YJR153W	viable			YIL010W	1
44	YJR158W	viable	10477308		YIL013C	1
45	YJR159W	viable			YIL053W	1
46	YJR160C	viable	28087672		YIL066C	1
47	YKL001C	viable			YIL074C	1
48	YKL004W	inviable			YIL099W	1
49	YKL008C	viable			YIL107C	1
50	YKL016C	viable			YIL111W	1
51	YKL019W	inviable			YIL124W	1
52	YKL024C	inviable			YIL125W	1
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2	YKL026C	viable		YIL134W	1
3	YKL029C	viable		YIL145C	1
4	YKL035W	inviable		YIL155C	1
5	YKL040C	viable		YIL160C	1
6	YKL055C	viable		YIL162W	1
7	YKL060C	inviable		YIL172C	1
8	YKL067W	viable		YIR027C	1
9	YKL080W	viable		YIR028W	1
10	YKL085W	viable		YIR029W	1
11	YKL088W	inviable		YIR031C	1
12	YKL094W	viable		YIR032C	1
13	YKL104C	inviable		YIR037W	1
14	YKL106W	viable		YJL045W	1
15	YKL120W	viable		YJL052W	1
16	YKL127W	viable		YJL060W	1
17	YKL132C	viable		YJL068C	1
18	YKL140W	viable		YJL071W	1
19	YKL141W	inviable		YJL100W	1
20	YKL146W	viable		YJL101C	1
21	YKL148C	viable		YJL121C	0.9996
22	YKL152C	inviable		YJL129C	1
23	YKL165C	inviable		YJL134W	1
24	YKL174C	viable		YJL137C	1
25	YKL181W	viable		YJL139C	1
26	YKL182W	inviable		YJL155C	1
27	YKL184W	viable		YJL166W	0.2076
28	YKL188C	viable		YJL196C	1
29	YKL192C	inviable		YJL212C	1
30	YKL194C	viable		YJL214W	1
31	YKL211C	viable		YJL216C	1
32	YKL212W	viable		YJL219W	1
33	YKL216W	viable		YJL221C	1
34	YKL217W	viable		YJR001W	1
35	YKL220C	viable		YJR009C	1
36	YKR009C	viable		YJR010W	1
37	YKR031C	viable		YJR019C	1
38	YKR039W	viable		YJR025C	1
39	YKR043C	viable		YJR048W	1
40	YKR052C	viable		YJR077C	1
41	YKR053C	viable		YJR078W	1
42	YKR058W	viable		YJR103W	1
43	YKR061W	viable		YJR105W	0.9999
44	YKR066C	viable		YJR109C	1
45	YKR067W	viable		YJR110W	1
46	YKR069W	viable		YJR121W	0.3945
47	YKR071C	inviable		YJR130C	1
48	YKR072C	viable		YJR133W	1
49	YKR080W	viable		YJR143C	1
50	YKR089C	viable		YJR152W	1
51	YKR097W	viable		YJR153W	1
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2	YLL012W	viable		YJR158W	1
3	YLL015W	viable		YJR159W	1
4	YLL018C	inviable		YJR160C	1
5	YLL027W	viable		YKL008C	1
6	YLL028W	viable		YKL016C	0.3945
7	YLL031C	inviable		YKL026C	1
8	YLL041C	viable		YKL029C	0.9801
9	YLL043W	viable		YKL055C	1
10	YLL048C	viable		YKL080W	1
11	YLL051C	viable		YKL085W	0.9971
12	YLL052C	viable		YKL094W	1
13	YLL057C	viable		YKL106W	1
14	YLL061W	viable		YKL120W	1
15	YLL062C	viable		YKL127W	1
16	YLR011W	viable		YKL132C	1
17	YLR017W	viable		YKL140W	1
18	YLR020C	viable		YKL146W	1
19	YLR027C	inviable		YKL148C	1
20	YLR028C	viable		YKL174C	1
21	YLR034C	viable		YKL181W	1
22	YLR038C	viable		YKL184W	1
23	YLR043C	viable		YKL188C	1
24	YLR044C	viable		YKL194C	1
25	YLR056W	viable		YKL212W	1
26	YLR058C	viable		YKL217W	1
27	YLR060W	inviable		YKR009C	1
28	YLR070C	viable		YKR031C	1
29	YLR081W	viable		YKR039W	1
30	YLR089C	viable		YKR043C	1
31	YLR092W	viable		YKR053C	1
32	YLR100W	inviable		YKR058W	1
33	YLR109W	viable		YKR061W	1
34	YLR133W	viable		YKR066C	1
35	YLR134W	viable		YKR067W	1
36	YLR138W	viable		YKR069W	1
37	YLR142W	viable		YKR072C	1
38	YLR146C	viable		YKR080W	1
39	YLR153C	inviable		YKR089C	1
40	YLR155C	viable		YKR097W	1
41	YLR157C	viable		YLL012W	1
42	YLR158C	viable		YLL015W	1
43	YLR160C	viable		YLL028W	1
44	YLR172C	viable		YLL041C	0.9941
45	YLR174W	viable		YLL043W	1
46	YLR180W	viable		YLL048C	1
47	YLR189C	viable		YLL052C	1
48	YLR201C	viable		YLL057C	1
49	YLR205C	viable		YLL061W	1
50	YLR209C	viable		YLL062C	1
51	YLR214W	viable		YLR011W	1
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2	YLR220W	inviable		YLR017W	1
3	YLR231C	viable		YLR020C	1
4	YLR237W	viable		YLR028C	1
5	YLR240W	inviable		YLR038C	0.2063
6	YLR245C	viable		YLR043C	1
7	YLR258W	viable		YLR044C	1
8	YLR260W	viable		YLR056W	1
9	YLR284C	viable		YLR058C	0.9862
10	YLR285W	viable		YLR070C	1
11	YLR295C	viable		YLR081W	1
12	YLR299W	viable		YLR089C	1
13	YLR300W	viable		YLR092W	1
14	YLR303W	viable		YLR109W	1
15	YLR304C	viable		YLR133W	1
16	YLR305C	inviable		YLR134W	1
17	YLR307W	viable		YLR138W	1
18	YLR308W	viable		YLR142W	1
19	YLR328W	viable		YLR146C	1
20	YLR342W	viable		YLR155C	1
21	YLR348C	viable		YLR157C	1
22	YLR354C	viable		YLR158C	1
23	YLR355C	inviable		YLR160C	1
24	YLR359W	inviable		YLR172C	1
25	YLR369W	viable		YLR174W	0.9998
26	YLR372W	viable		YLR180W	1
27	YLR377C	viable		YLR189C	1
28	YLR382C	viable		YLR201C	1
29	YLR386W	viable		YLR209C	1
30	YLR395C	viable		YLR231C	1
31	YLR410W	viable		YLR237W	1
32	YLR420W	viable		YLR245C	1
33	YLR432W	viable		YLR258W	1
34	YLR438W	viable		YLR260W	1
35	YLR447C	viable		YLR284C	1
36	YLR450W	viable		YLR285W	1
37	YML004C	viable		YLR295C	0.3945
38	YML008C	viable		YLR299W	1
39	YML022W	viable		YLR300W	1
40	YML035C	viable		YLR307W	1
41	YML042W	viable		YLR308W	1
42	YML054C	viable		YLR328W	1
43	YML056C	viable		YLR342W	1
44	YML059C	viable		YLR348C	1
45	YML070W	viable		YLR354C	1
46	YML075C	viable		YLR372W	1
47	YML081C-A	viable		YLR377C	1
48	YML086C	viable		YLR382C	1
49	YML100W	viable		YLR386W	1
50	YML106W	viable		YLR395C	0.2063
51	YML110C	viable		YLR410W	1
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2	YML120C	viable		YLR432W	1
3	YML123C	viable		YLR438W	1
4	YML126C	inviable		YLR447C	1
5	YMR006C	viable		YLR450W	1
6	YMR008C	viable		YML004C	1
7	YMR009W	viable		YML022W	1
8	YMR011W	viable		YML035C	1
9	YMR013C	inviable		YML042W	1
10	YMR015C	viable		YML054C	1
11	YMR020W	viable		YML056C	1
12	YMR041C	viable		YML059C	1
13	YMR054W	viable		YML070W	1
14	YMR056C	viable		YML075C	1
15	YMR058W	viable		YML081C- ^A	0.3945
16	YMR062C	viable		YML086C	1
17	YMR083W	viable		YML100W	1
18	YMR088C	viable		YML106W	1
19	YMR101C	viable		YML110C	1
20	YMR105C	viable		YML120C	1
21	YMR108W	viable		YML123C	1
22	YMR113W	inviable		YMR006C	1
23	YMR120C	viable		YMR008C	1
24	YMR145C	viable		YMR009W	1
25	YMR165C	viable		YMR011W	1
26	YMR169C	viable		YMR015C	1
27	YMR170C	viable		YMR020W	1
28	YMR189W	viable		YMR041C	1
29	YMR202W	viable		YMR054W	1
30	YMR205C	viable		YMR056C	1
31	YMR207C	viable		YMR083W	1
32	YMR208W	inviable		YMR088C	1
33	YMR217W	viable		YMR101C	1
34	YMR220W	inviable		YMR105C	1
35	YMR226C	viable		YMR120C	1
36	YMR241W	viable		YMR145C	1
37	YMR246W	viable		YMR165C	1
38	YMR250W	viable		YMR169C	1
39	YMR256C	viable		YMR170C	1
40	YMR261C	viable		YMR189W	0.987
41	YMR267W	viable		YMR205C	0.9715
42	YMR271C	viable		YMR207C	1
43	YMR272C	viable		YMR226C	1
44	YMR278W	viable		YMR241W	1
45	YMR281W	inviable		YMR246W	1
46	YMR289W	viable		YMR250W	1
47	YMR293C	viable		YMR256C	0.2063
48	YMR296C	inviable		YMR261C	1
49	YMR298W	inviable		YMR267W	0.9914
50	YMR300C	viable		YMR271C	1
51	YMR301C	inviable		YMR272C	1
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2	YMR303C	viable		YMR278W	1
3	YMR308C	inviable		YMR289W	1
4	YMR313C	viable		YMR293C	1
5	YMR318C	viable		YMR303C	1
6	YMR319C	viable		YMR313C	1
7	YNL003C	viable		YMR318C	1
8	YNL009W	viable		YNL003C	1
9	YNL029C	viable		YNL009W	1
10	YNL037C	viable		YNL029C	1
11	YNL045W	viable		YNL037C	1
12	YNL052W	viable		YNL045W	1
13	YNL071W	viable		YNL052W	1
14	YNL073W	viable		YNL071W	0.9897
15	YNL101W	viable		YNL073W	1
16	YNL104C	viable		YNL101W	1
17	YNL106C	viable		YNL104C	0.9981
18	YNL117W	viable		YNL106C	1
19	YNL129W	viable		YNL117W	1
20	YNL130C	viable		YNL129W	1
21	YNL141W	viable		YNL130C	1
22	YNL142W	viable		YNL141W	1
23	YNL169C	viable		YNL142W	1
24	YNL192W	viable		YNL169C	1
25	YNL202W	viable		YNL192W	1
26	YNL220W	viable		YNL202W	1
27	YNL240C	inviable		YNL268W	1
28	YNL241C	inviable		YNL270C	1
29	YNL247W	inviable		YNL292W	1
30	YNL256W	inviable		YNL318C	1
31	YNL259C	viable		YNL325C	1
32	YNL267W	inviable		YNR001C	1
33	YNL268W	viable		YNR008W	1
34	YNL270C	viable		YNR012W	1
35	YNL277W	viable		YNR013C	1
36	YNL280C	inviable		YNR019W	1
37	YNL292W	viable		YNR033W	1
38	YNL316C	viable		YNR041C	1
39	YNL318C	viable		YNR056C	1
40	YNL325C	viable		YNR057C	1
41	YNR001C	viable		YNR058W	1
42	YNR008W	viable		YNR067C	1
43	YNR012W	viable		YNR072W	1
44	YNR013C	viable		YOL011W	1
45	YNR016C	inviable		YOL020W	1
46	YNR019W	viable		YOL033W	1
47	YNR033W	viable		YOL049W	1
48	YNR041C	viable		YOL052C	1
49	YNR043W	inviable		YOL055C	1
50	YNR050C	viable		YOL059W	1
51	YNR056C	viable		YOL061W	1
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2	YNR057C	viable		YOL064C	0.9903
3	YNR058W	viable		YOL065C	1
4	YNR060W	viable		YOL068C	1
5	YNR067C	viable		YOL086C	1
6	YNR072W	viable		YOL096C	1
7	YOL011W	viable		YOL103W	1
8	YOL020W	viable		YOL126C	0.9953
9	YOL033W	viable		YOL136C	1
10	YOL049W	viable		YOL151W	1
11	YOL052C	viable		YOL156W	1
12	YOL055C	viable		YOR011W	1
13	YOL058W	viable		YOR025W	1
14	YOL059W	viable		YOR040W	1
15	YOL061W	viable		YOR054C	1
16	YOL064C	viable		YOR065W	0.2076
17	YOL065C	viable		YOR071C	1
18	YOL066C	inviable		YOR081C	1
19	YOL068C	viable		YOR099W	1
20	YOL086C	viable		YOR100C	1
21	YOL096C	viable		YOR108W	1
22	YOL097C	inviable		YOR109W	1
23	YOL103W	viable		YOR120W	1
24	YOL126C	viable		YOR125C	1
25	YOL136C	viable		YOR126C	1
26	YOL140W	viable		YOR136W	1
27	YOL143C	viable		YOR142W	1
28	YOL151W	viable		YOR155C	1
29	YOL156W	viable	10477308	YOR163W	1
30	YOL158C	viable		YOR171C	1
31	YOR011W	viable		YOR175C	1
32	YOR025W	viable		YOR180C	1
33	YOR040W	viable		YOR184W	0.9852
34	YOR054C	viable		YOR190W	1
35	YOR065W	viable		YOR192C	1
36	YOR071C	viable		YOR209C	1
37	YOR074C	inviable		YOR221C	1
38	YOR081C	viable		YOR222W	1
39	YOR095C	inviable		YOR241W	1
40	YOR099W	viable		YOR245C	1
41	YOR100C	viable		YOR270C	1
42	YOR108W	viable		YOR273C	1
43	YOR109W	viable		YOR303W	1
44	YOR120W	viable		YOR311C	1
45	YOR125C	viable		YOR317W	1
46	YOR126C	viable		YOR321W	1
47	YOR128C	viable		YOR323C	1
48	YOR130C	viable		YOR332W	1
49	YOR136W	viable		YOR347C	1
50	YOR142W	viable		YOR348C	1
51	YOR143C	inviable		YOR360C	1
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2	YOR155C	viable		YOR374W	1
3	YOR163W	viable		YOR375C	1
4	YOR168W	inviable		YOR377W	1
5	YOR171C	viable		YOR388C	0.9868
6	YOR175C	viable		YPL015C	1
7	YOR176W	inviable		YPL023C	1
8	YOR180C	viable		YPL036W	1
9	YOR184W	viable		YPL040C	1
10	YOR190W	viable		YPL053C	1
11	YOR192C	viable		YPL057C	1
12	YOR202W	viable		YPL059W	1
13	YOR209C	viable		YPL061W	0.9997
14	YOR221C	viable		YPL069C	1
15	YOR222W	viable		YPL078C	0.3945
16	YOR226C	viable		YPL087W	1
17	YOR232W	inviable		YPL091W	1
18	YOR236W	inviable		YPL092W	1
19	YOR241W	viable		YPL097W	1
20	YOR245C	viable		YPL104W	1
21	YOR270C	viable		YPL110C	1
22	YOR273C	viable		YPL111W	1
23	YOR278W	inviable		YPL134C	1
24	YOR303W	viable		YPL147W	1
25	YOR311C	viable		YPL148C	1
26	YOR317W	viable		YPL188W	1
27	YOR321W	viable		YPL189W	1
28	YOR323C	viable		YPL206C	1
29	YOR332W	viable		YPL212C	1
30	YOR335C	inviable		YPL214C	1
31	YOR347C	viable		YPL234C	1
32	YOR348C	viable		YPL244C	1
33	YOR360C	viable		YPL258C	1
34	YOR374W	viable		YPL262W	0.9825
35	YOR375C	viable		YPL265W	1
36	YOR377W	viable		YPL271W	0.3945
37	YOR381W	viable		YPL273W	1
38	YOR382W	viable		YPL274W	1
39	YOR383C	viable		YPR001W	1
40	YOR384W	viable		YPR002W	1
41	YOR388C	viable	11921099	YPR006C	1
42	YPL015C	viable		YPR020W	1
43	YPL023C	viable		YPR021C	0.9955
44	YPL028W	inviable		YPR026W	1
45	YPL036W	viable		YPR036W	1
46	YPL040C	viable		YPR047W	1
47	YPL053C	viable		YPR062W	1
48	YPL057C	viable		YPR069C	1
49	YPL059W	viable		YPR074C	1
50	YPL061W	viable		YPR081C	1
51	YPL069C	viable		YPR121W	1
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2	YPL078C	viable		YPR128C	1
3	YPL087W	viable		YPR138C	1
4	YPL091W	viable		YPR140W	1
5	YPL092W	viable		YPR145W	1
6	YPL097W	viable		YPR156C	1
7	YPL104W	viable		YPR159W	1
8	YPL110C	viable		YPR160W	1
9	YPL111W	viable		YPR184W	1
10	YPL117C	inviable		YPR191W	0.2076
11	YPL134C	viable		YPR192W	1
12	YPL135W	viable			
13	YPL147W	viable			
14	YPL148C	viable			
15	YPL160W	inviable			
16	YPL172C	viable			
17	YPL188W	viable			
18	YPL189W	viable			
19	YPL202C	viable			
20	YPL206C	viable			
21	YPL212C	viable			
22	YPL214C	viable			
23	YPL231W	inviable			
24	YPL234C	viable			
25	YPL244C	viable			
26	YPL252C	inviable			
27	YPL258C	viable			
28	YPL262W	viable			
29	YPL265W	viable			
30	YPL268W	inviable			
31	YPL271W	viable			
32	YPL273W	viable			
33	YPL274W	viable			
34	YPR001W	viable			
35	YPR002W	viable			
36	YPR006C	viable			
37	YPR020W	viable			
38	YPR021C	viable			
39	YPR026W	viable			
40	YPR033C	inviable			
41	YPR035W	inviable			
42	YPR036W	viable			
43	YPR047W	viable			
44	YPR048W	inviable			
45	YPR060C	viable			
46	YPR062W	viable			
47	YPR067W	viable			
48	YPR069C	viable			
49	YPR074C	viable			
50	YPR081C	viable	10874035		
51	YPR113W	inviable			
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YPR121W	viable
YPR124W	inviable
YPR128C	viable
YPR138C	viable
YPR140W	viable
YPR145W	viable
YPR156C	viable
YPR159W	viable
YPR160W	viable
YPR167C	viable
YPR183W	inviable
YPR184W	viable
YPR191W	viable
YPR192W	viable
YYKL087C	viable

For Peer Review

	Essentiality prediction	Essentiality		Y7.Fe	deletant growth	Essentiality prediction
1						
2	inviab	viable		YAR015W		0 inviable
3	inviab	viable		YBL033C		0 inviable
4	inviab	viable		YBL098W		0 inviable
5	inviab	viable		YBR115C		0 inviable
6	inviab	viable		YBR126C		0 inviable
7	inviab	viable		YBR159W		0 inviable
8	inviab	viable		YBR166C		0 inviable
9	inviab	viable		YBR248C		0 inviable
10	inviab	viable		YCL018W		0 inviable
11	inviab	viable		YCL030C		0 inviable
12	inviab	viable		YCR053W		0 inviable
13	inviab	viable		YDR007W		0 inviable
14	inviab	viable		YDR074W		0 inviable
15	inviab	viable		YDR127W		0 inviable
16	inviab	viable		YDR158W		0 inviable
17	inviab	viable		YDR234W		0 inviable
18	inviab	viable		YDR354W		0 inviable
19	inviab	viable		YDR408C		0 inviable
20	inviab	viable		YDR428C		0 inviable
21	inviab	viable		YEL021W		0 inviable
22	inviab	viable		YER014W		0 inviable
23	inviab	viable		YER026C		0 inviable
24	inviab	viable		YER052C		0 inviable
25	inviab	viable		YER055C		0 inviable
26	inviab	viable		YER069W		0 inviable
27	inviab	viable		YER090W		0 inviable
28	inviab	viable		YER091C		0 inviable
29	inviab	viable		YFR025C		0 inviable
30	inviab	viable		YFR030W		0 inviable
31	inviab	viable		YFR047C		0 inviable
32	inviab	viable		YGL009C		0 inviable
33	inviab	viable		YGL012W		0 inviable
34	inviab	viable		YGL026C		0 inviable
35	inviab	viable		YGL148W		0 inviable
36	inviab	viable		YGL154C		0 inviable
37	inviab	viable		YGL234W		0 inviable
38	inviab	viable		YGR061C		0 inviable
39	inviab	viable		YGR204W		0 inviable
40	inviab	viable		YHR018C		0 inviable
41	inviab	viable		YHR025W		0 inviable
42	inviab	viable		YIL020C		0 inviable
43	inviab	viable		YIL094C		0 inviable
44	inviab	viable		YIL116W		0 inviable
45	inviab	viable		YIR034C		0 inviable
46	inviab	viable		YJL088W		0 inviable
47	inviab	viable		YJL130C		0 inviable
48	inviab	viable		YJL153C		0 inviable
49	inviab	viable		YJR025C		0 inviable
50	inviab	viable		YJR073C		0 inviable
51						
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1					
2	inviab	viable		YJR078W	0 inviab
3	inviab	viable		YJR137C	0 inviab
4	inviab	viable		YJR139C	0 inviab
5	inviab	viable		YKL001C	0 inviab
6	inviab	viable		YKL067W	0 inviab
7	inviab	viable		YKL211C	0 inviab
8	inviab	viable		YKL216W	0 inviab
9	inviab	viable		YLR231C	0 inviab
10	inviab	viable		YLR303W	0 inviab
11	inviab	viable		YLR304C	0 inviab
12	inviab	viable		YLR420W	0 inviab
13	inviab	viable		YML008C	0 inviab
14	inviab	viable		YMR062C	0 inviab
15	inviab	viable		YMR108W	0 inviab
16	inviab	viable		YMR202W	0 inviab
17	inviab	viable		YMR217W	0 inviab
18	inviab	viable		YMR300C	0 inviab
19	inviab	viable		YMR319C	0 inviab
20	inviab	viable		YNL220W	0 inviab
21	inviab	viable		YNL277W	0 inviab
22	inviab	viable		YNL316C	0 inviab
23	inviab	viable		YNR050C	0 inviab
24	inviab	viable		YOL058W	0 inviab
25	inviab	viable		YOL140W	0 inviab
26	inviab	viable		YOL143C	0 inviab
27	inviab	viable		YOR128C	0 inviab
28	inviab	viable		YOR130C	0 inviab
29	inviab	viable		YOR202W	0 inviab
30	inviab	viable		YPL172C	0 inviab
31	inviab	inviab		YPR060C	0 inviab
32	inviab	inviab		YPR167C	0 inviab
33	inviab	inviab		YBL076C	0 inviab
34	inviab	inviab		YBR029C	0 inviab
35	inviab	inviab		YBR153W	0 inviab
36	inviab	inviab		YBR256C	0 inviab
37	inviab	inviab		YBR265W	0 inviab
38	inviab	inviab		YDL015C	0 inviab
39	inviab	inviab		YDL055C	0 inviab
40	inviab	inviab		YDL103C	0 inviab
41	inviab	inviab		YDL141W	0 inviab
42	inviab	inviab		YDL205C	0 inviab
43	inviab	inviab		YDR037W	0 inviab
44	inviab	inviab		YDR044W	0 inviab
45	inviab	inviab		YDR047W	0 inviab
46	inviab	inviab		YDR062W	0 inviab
47	inviab	inviab		YDR226W	0 inviab
48	inviab	inviab		YDR232W	0 inviab
49	inviab	inviab		YDR341C	0 inviab
50	inviab	inviab		YDR353W	0 inviab
51	inviab	inviab		YDR367W	0 inviab
52	inviab	inviab			
53	inviab	inviab			
54	inviab	inviab			
55	inviab	inviab			
56	inviab	inviab			
57					
58					
59					
60					

1					
2	inviab	inviab		YDR376W	0 inviab
3	inviab	inviab		YDR454C	0 inviab
4	inviab	inviab		YDR487C	0 inviab
5	inviab	inviab		YEL058W	0 inviab
6	inviab	inviab		YER003C	0 inviab
7	inviab	inviab		YER023W	0 inviab
8	inviab	inviab		YER043C	0 inviab
9	inviab	inviab		YFL017C	0 inviab
10	inviab	inviab		YFL022C	0 inviab
11	inviab	inviab		YFL045C	0 inviab
12	inviab	inviab		YGL001C	0 inviab
13	inviab	inviab		YGL040C	0 inviab
14	inviab	inviab		YGL055W	0 inviab
15	inviab	inviab		YGL245W	0 inviab
16	inviab	inviab		YGR060W	0 inviab
17	inviab	inviab		YGR094W	0 inviab
18	inviab	inviab		YGR175C	0 inviab
19	inviab	inviab		YGR185C	0 inviab
20	inviab	inviab		YGR264C	0 inviab
21	inviab	inviab		YHR007C	0 inviab
22	inviab	inviab		YHR019C	0 inviab
23	inviab	inviab		YHR020W	0 inviab
24	inviab	inviab		YHR042W	0 inviab
25	inviab	inviab		YHR072W	0 inviab
26	inviab	inviab		YHR074W	0 inviab
27	inviab	inviab		YHR190W	0 inviab
28	inviab	inviab		YIL078W	0 inviab
29	inviab	inviab		YJL097W	0 inviab
30	inviab	inviab		YJL167W	0 inviab
31	inviab	inviab		YJR016C	0 inviab
32	inviab	inviab		YKL004W	0 inviab
33	inviab	inviab		YKL024C	0 inviab
34	inviab	inviab		YKL104C	0 inviab
35	inviab	inviab		YKL182W	0 inviab
36	inviab	inviab		YLL018C	0 inviab
37	inviab	inviab		YLR060W	0 inviab
38	inviab	inviab		YLR100W	0 inviab
39	inviab	inviab		YLR355C	0 inviab
40	inviab	inviab		YLR359W	0 inviab
41	inviab	inviab		YML126C	0 inviab
42	inviab	inviab		YMR208W	0 inviab
43	inviab	inviab		YMR220W	0 inviab
44	inviab	inviab		YMR296C	0 inviab
45	inviab	inviab		YNL247W	0 inviab
46	inviab	inviab		YNL280C	0 inviab
47	inviab	inviab		YNR016C	0 inviab
48	inviab	inviab		YNR043W	0 inviab
49	inviab	inviab		YOL066C	0 inviab
50	inviab	inviab		YOL097C	0 inviab
51	inviab	inviab		YOR074C	0 inviab
52					
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1					
2	inviab	inviab		YOR095C	0 inviab
3	inviab	inviab		YOR168W	0 inviab
4	inviab	inviab		YOR176W	0 inviab
5	inviab	inviab		YOR236W	0 inviab
6	inviab	inviab		YOR278W	0 inviab
7	inviab	inviab		YOR335C	0 inviab
8	inviab	inviab		YPL028W	0 inviab
9	inviab	inviab		YPL117C	0 inviab
10	inviab	inviab		YPL160W	0 inviab
11	inviab	inviab		YPL231W	0 inviab
12	inviab	inviab		YPL252C	0 inviab
13	viable	inviab		YPR033C	0 inviab
14	viable	inviab		YPR035W	0 inviab
15	viable	inviab		YPR113W	0 inviab
16	viable	inviab		YPR183W	0 inviab
17	viable	inviab		YAL012W	1 viable
18	viable	inviab		YAL038W	1 viable
19	viable	inviab		YBL030C	1 viable
20	viable	inviab		YBR002C	1 viable
21	viable	inviab		YBR004C	1 viable
22	viable	inviab		YBR011C	1 viable
23	viable	inviab		YBR038W	1 viable
24	viable	inviab		YBR110W	1 viable
25	viable	inviab		YBR121C	1 viable
26	viable	inviab		YBR192W	1 viable
27	viable	inviab		YBR196C	0.9895 viable
28	viable	inviab		YBR252W	1 viable
29	viable	inviab		YCL004W	1 viable
30	viable	inviab		YCL017C	1 viable
31	viable	inviab		YCL052C	1 viable
32	viable	inviab		YCR012W	0.8989 viable
33	viable	inviab		YDL004W	0.398 viable
34	viable	inviab		YDL045C	1 viable
35	viable	inviab		YDL067C	0.2083 viable
36	viable	inviab		YDL120W	1 viable
37	viable	inviab		YDR023W	1 viable
38	viable	inviab		YDR050C	0.9725 viable
39	viable	inviab		YDR196C	1 viable
40	viable	inviab		YDR208W	1 viable
41	viable	inviab		YDR236C	1 viable
42	viable	inviab		YDR267C	1 viable
43	viable	inviab		YDR302W	1 viable
44	viable	inviab		YDR373W	1 viable
45	viable	inviab		YDR531W	1 viable
46	viable	inviab		YER005W	0.9998 viable
47	viable	inviab		YER048W-1	1 viable
48	viable	inviab		YER060W	1 viable
49	viable	inviab		YER070W	1 viable
50	viable	inviab		YGL008C	1 viable
51	viable	inviab		YGL018C	1 viable
52					
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58					
59					
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1					
2	viable	inviable		YGL084C	1 viable
3	viable	inviable		YGL091C	1 viable
4	viable	inviable		YGL142C	1 viable
5	viable	inviable		YGL225W	1 viable
6	viable	inviable		YGR029W	1 viable
7	viable	inviable		YGR065C	1 viable
8	viable	inviable		YGR155W	1 viable
9	viable	inviable		YGR191W	1 viable
10	viable	inviable		YGR244C	1 viable
11	viable	inviable		YGR267C	1 viable
12	viable	inviable		YGR277C	1 viable
13	viable	inviable		YHR068W	1 viable
14	viable	inviable		YHR122W	1 viable
15	viable	inviable		YHR128W	1 viable
16	viable	inviable		YIL003W	1 viable
17	viable	inviable		YIL083C	1 viable
18	viable	inviable		YJL005W	1 viable
19	viable	inviable		YJL026W	1 viable
20	viable	inviable		YJL091C	1 viable
21	viable	inviable		YJL198W	1 viable
22	viable	inviable		YJR013W	1 viable
23	viable	inviable		YJR045C	1 viable
24	viable	inviable		YJR049C	1 viable
25	viable	inviable		YJR057W	1 viable
26	viable	inviable		YJR095W	0.9999 viable
27	viable	inviable		YKL019W	1 viable
28	viable	inviable		YKL035W	1 viable
29	viable	inviable		YKL060C	0.9717 viable
30	viable	inviable		YKL088W	1 viable
31	viable	inviable		YKL141W	0.9945 viable
32	viable	inviable		YKL152C	0.9645 viable
33	viable	inviable		YKL165C	1 viable
34	viable	inviable		YKL192C	1 viable
35	viable	viable		YKR071C	1 viable
36	viable	viable		YLL031C	1 viable
37	viable	viable		YLR027C	1 viable
38	viable	viable		YLR153C	1 viable
39	viable	viable		YLR220W	1 viable
40	viable	viable		YLR240W	1 viable
41	viable	viable		YLR305C	1 viable
42	viable	viable		YMR013C	1 viable
43	viable	viable		YMR113W	1 viable
44	viable	viable		YMR281W	1 viable
45	viable	viable		YMR298W	1 viable
46	viable	viable		YMR301C	1 viable
47	viable	viable		YMR308C	1 viable
48	viable	viable		YNL240C	1 viable
49	viable	viable		YNL241C	0.9994 viable
50	viable	viable		YNL256W	1 viable
51	viable	viable		YNL267W	1 viable
52					
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56					
57					
58					
59					
60					

1					
2	viable	viable		YOR143C	1 viable
3	viable	viable		YOR232W	1 viable
4	viable	viable		YPL268W	1 viable
5	viable	viable		YPR048W	1 viable
6	viable	viable		YPR124W	1 viable
7	viable	viable		Q0045	0.2083 viable
8	viable	viable		Q0080	0.398 viable
9	viable	viable		Q0085	0.398 viable
10	viable	viable		Q0105	0.2095 viable
11	viable	viable		Q0130	0.398 viable
12	viable	viable		Q0250	0.2083 viable
13	viable	viable		Q0275	0.2083 viable
14	viable	viable		YAL022C	1 viable
15	viable	viable		YAL023C	1 viable
16	viable	viable		YAL039C	1 viable
17	viable	viable		YAL044C	0.9874 viable
18	viable	viable		YAL054C	1 viable
19	viable	viable		YAL060W	1 viable
20	viable	viable		YAL062W	1 viable
21	viable	viable		YAR035W	1 viable
22	viable	viable		YAR071W	1 viable
23	viable	viable		YBL011W	1 viable
24	viable	viable		YBL013W	1 viable
25	viable	viable		YBL015W	1 viable
26	viable	viable		YBL039C	1 viable
27	viable	viable		YBL042C	1 viable
28	viable	viable		YBL045C	0.2095 viable
29	viable	viable		YBL064C	1 viable
30	viable	viable		YBL068W	1 viable
31	viable	viable		YBL099W	0.398 viable
32	viable	viable		YBR003W	1 viable
33	viable	viable		YBR006W	1 viable
34	viable	viable		YBR018C	1 viable
35	viable	viable		YBR019C	1 viable
36	viable	viable		YBR020W	1 viable
37	viable	viable		YBR021W	1 viable
38	viable	viable		YBR023C	1 viable
39	viable	viable		YBR026C	1 viable
40	viable	viable		YBR034C	1 viable
41	viable	viable		YBR035C	1 viable
42	viable	viable		YBR036C	1 viable
43	viable	viable		YBR039W	0.398 viable
44	viable	viable		YBR041W	1 viable
45	viable	viable		YBR042C	1 viable
46	viable	viable		YBR058C-A	1 viable
47	viable	viable		YBR068C	1 viable
48	viable	viable		YBR069C	1 viable
49	viable	viable		YBR084W	1 viable
50	viable	viable		YBR085W	1 viable
51	viable	viable		YBR092C	1 viable
52					
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57					
58					
59					
60					

1					
2	viable	viable		YBR093C	1 viable
3	viable	viable		YBR097W	1 viable
4	viable	viable		YBR117C	1 viable
5	viable	viable		YBR127C	1 viable
6	viable	viable		YBR132C	1 viable
7	viable	viable		YBR145W	1 viable
8	viable	viable		YBR149W	1 viable
9	viable	viable		YBR161W	1 viable
10	viable	viable		YBR176W	1 viable
11	viable	viable		YBR180W	1 viable
12	viable	viable		YBR183W	1 viable
13	viable	viable		YBR199W	1 viable
14	viable	viable		YBR204C	1 viable
15	viable	viable		YBR205W	1 viable
16	viable	viable		YBR207W	1 viable
17	viable	viable		YBR208C	1 viable
18	viable	viable		YBR213W	1 viable
19	viable	viable		YBR218C	1 viable
20	viable	viable		YBR221C	0.9909 viable
21	viable	viable		YBR244W	1 viable
22	viable	viable		YBR249C	1 viable
23	viable	viable		YBR263W	0.9874 viable
24	viable	viable		YBR291C	0.9996 viable
25	viable	viable		YBR293W	1 viable
26	viable	viable		YBR294W	1 viable
27	viable	viable		YBR296C	1 viable
28	viable	viable		YBR298C	1 viable
29	viable	viable		YBR299W	1 viable
30	viable	viable		YCL009C	1 viable
31	viable	viable		YCL025C	1 viable
32	viable	viable		YCL035C	1 viable
33	viable	viable		YCL038C	1 viable
34	viable	viable		YCL040W	1 viable
35	viable	viable		YCL050C	0.9998 viable
36	viable	viable		YCL064C	1 viable
37	viable	viable		YCL069W	1 viable
38	viable	viable		YCR005C	1 viable
39	viable	viable		YCR010C	1 viable
40	viable	viable		YCR024C	1 viable
41	viable	viable		YCR024C-A	1 viable
42	viable	viable		YCR028C	1 viable
43	viable	viable		YCR034W	1 viable
44	viable	viable		YCR036W	1 viable
45	viable	viable		YCR037C	1 viable
46	viable	viable		YCR048W	1 viable
47	viable	viable		YCR075C	1 viable
48	viable	viable		YCR083W	1 viable
49	viable	viable		YCR098C	1 viable
50	viable	viable		YCR105W	1 viable
51	viable	viable		YDL022W	1 viable
52					
53					
54					
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57					
58					
59					
60					

1					
2	viable	viable		YDL042C	1 viable
3	viable	viable		YDL052C	1 viable
4	viable	viable		YDL066W	0.9985 viable
5	viable	viable		YDL078C	1 viable
6	viable	viable		YDL080C	1 viable
7	viable	viable		YDL085W	1 viable
8	viable	viable		YDL090C	1 viable
9	viable	viable		YDL093W	1 viable
10	viable	viable		YDL095W	1 viable
11	viable	viable		YDL100C	1 viable
12	viable	viable		YDL131W	1 viable
13	viable	viable		YDL142C	1 viable
14	viable	viable		YDL168W	1 viable
15	viable	viable		YDL171C	1 viable
16	viable	viable		YDL174C	1 viable
17	viable	viable		YDL178W	1 viable
18	viable	viable		YDL182W	1 viable
19	viable	viable		YDL185W	1 viable
20	viable	viable		YDL198C	1 viable
21	viable	viable		YDL210W	1 viable
22	viable	viable		YDL215C	1 viable
23	viable	viable		YDL238C	1 viable
24	viable	viable		YDL245C	1 viable
25	viable	viable		YDL247W	1 viable
26	viable	viable		YDR001C	1 viable
27	viable	viable		YDR017C	1 viable
28	viable	viable		YDR019C	0.9874 viable
29	viable	viable		YDR035W	0.9996 viable
30	viable	viable		YDR046C	1 viable
31	viable	viable		YDR058C	1 viable
32	viable	viable		YDR072C	1 viable
33	viable	viable		YDR098C	1 viable
34	viable	viable		YDR135C	1 viable
35	viable	viable		YDR147W	1 viable
36	viable	viable		YDR148C	1 viable
37	viable	viable		YDR173C	1 viable
38	viable	viable		YDR178W	0.9945 viable
39	viable	viable		YDR191W	1 viable
40	viable	viable		YDR204W	1 viable
41	viable	viable		YDR256C	1 viable
42	viable	viable		YDR261C	1 viable
43	viable	viable		YDR268W	1 viable
44	viable	viable		YDR270W	1 viable
45	viable	viable		YDR272W	1 viable
46	viable	viable		YDR284C	1 viable
47	viable	viable		YDR287W	1 viable
48	viable	viable		YDR294C	1 viable
49	viable	viable		YDR297W	1 viable
50	viable	viable		YDR298C	0.398 viable
51	viable	viable		YDR300C	1 viable
52					
53					
54					
55					
56					
57					
58					
59					
60					

1					
2	viable	viable		YDR305C	1 viable
3	viable	viable		YDR315C	1 viable
4	viable	viable		YDR321W	1 viable
5	viable	viable		YDR322C-A	1 viable
6	viable	viable		YDR335W	1 viable
7	viable	viable		YDR342C	1 viable
8	viable	viable		YDR343C	1 viable
9	viable	viable		YDR345C	1 viable
10	viable	viable		YDR368W	1 viable
11	viable	viable		YDR377W	0.398 viable
12	viable	viable		YDR380W	1 viable
13	viable	viable		YDR384C	1 viable
14	viable	viable		YDR399W	1 viable
15	viable	viable		YDR400W	1 viable
16	viable	viable		YDR402C	1 viable
17	viable	viable		YDR403W	1 viable
18	viable	viable		YDR453C	1 viable
19	viable	viable		YDR481C	1 viable
20	viable	viable		YDR483W	1 viable
21	viable	viable		YDR497C	1 viable
22	viable	viable		YDR502C	1 viable
23	viable	viable		YDR503C	1 viable
24	viable	viable		YDR508C	1 viable
25	viable	viable		YDR513W	1 viable
26	viable	viable		YDR529C	0.2095 viable
27	viable	viable		YDR530C	1 viable
28	viable	viable		YDR534C	1 viable
29	viable	viable		YDR536W	1 viable
30	viable	viable		YEL006W	1 viable
31	viable	viable		YEL017C-A	1 viable
32	viable	viable		YEL024W	0.2095 viable
33	viable	viable		YEL027W	1 viable
34	viable	viable		YEL029C	1 viable
35	viable	viable		YEL038W	1 viable
36	viable	viable		YEL039C	1 viable
37	viable	viable		YEL041W	1 viable
38	viable	viable		YEL042W	1 viable
39	viable	viable		YEL046C	1 viable
40	viable	viable		YEL047C	1 viable
41	viable	viable		YEL051W	1 viable
42	viable	viable		YEL063C	1 viable
43	viable	viable		YEL065W	1 viable
44	viable	viable		YEL069C	1 viable
45	viable	viable		YEL071W	1 viable
46	viable	viable		YER015W	1 viable
47	viable	viable		YER019W	1 viable
48	viable	viable		YER024W	1 viable
49	viable	viable		YER037W	1 viable
50	viable	viable		YER053C	1 viable
51	viable	viable		YER056C	1 viable
52					
53					
54					
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56					
57					
58					
59					
60					

1					
2	viable	viable		YER060W-/-	1 viable
3	viable	viable		YER061C	1 viable
4	viable	viable		YER062C	1 viable
5	viable	viable		YER065C	1 viable
6	viable	viable		YER073W	1 viable
7	viable	viable		YER081W	1 viable
8	viable	viable		YER086W	1 viable
9	viable	viable		YER099C	1 viable
10	viable	viable		YER119C	1 viable
11	viable	viable		YER145C	1 viable
12	viable	viable		YER152C	1 viable
13	viable	viable		YER170W	1 viable
14	viable	viable		YER174C	1 viable
15	viable	viable		YER175C	1 viable
16	viable	viable		YER178W	0.9909 viable
17	viable	viable		YER183C	1 viable
18	viable	viable		YFL001W	1 viable
19	viable	viable		YFL011W	1 viable
20	viable	viable		YFL018C	0.9638 viable
21	viable	viable		YFL030W	1 viable
22	viable	viable		YFL041W	1 viable
23	viable	viable		YFL053W	1 viable
24	viable	viable		YFL055W	1 viable
25	viable	viable		YFR015C	1 viable
26	viable	viable		YFR019W	1 viable
27	viable	viable		YFR033C	0.2095 viable
28	viable	viable		YFR053C	1 viable
29	viable	viable		YGL037C	1 viable
30	viable	viable		YGL062W	1 viable
31	viable	viable		YGL063W	1 viable
32	viable	viable		YGL067W	1 viable
33	viable	viable		YGL071W	1 viable
34	viable	viable		YGL077C	1 viable
35	viable	viable		YGL080W	1 viable
36	viable	viable		YGL119W	1 viable
37	viable	viable		YGL125W	1 viable
38	viable	viable		YGL184C	1 viable
39	viable	viable		YGL186C	1 viable
40	viable	viable		YGL187C	0.2083 viable
41	viable	viable		YGL191W	0.2083 viable
42	viable	viable		YGL202W	0.9995 viable
43	viable	viable		YGL205W	1 viable
44	viable	viable		YGL224C	1 viable
45	viable	viable		YGL248W	1 viable
46	viable	viable		YGL253W	1 viable
47	viable	viable		YGL256W	1 viable
48	viable	viable		YGR007W	1 viable
49	viable	viable		YGR010W	1 viable
50	viable	viable		YGR019W	1 viable
51	viable	viable		YGR020C	1 viable
52					
53					
54					
55					
56					
57					
58					
59					
60					

1					
2	viable	viable		YGR032W	1 viable
3	viable	viable		YGR055W	1 viable
4	viable	viable		YGR087C	1 viable
5	viable	viable		YGR088W	1 viable
6	viable	viable		YGR096W	1 viable
7	viable	viable		YGR110W	1 viable
8	viable	viable		YGR121C	1 viable
9	viable	viable		YGR124W	1 viable
10	viable	viable		YGR138C	1 viable
11	viable	viable		YGR143W	1 viable
12	viable	viable		YGR157W	1 viable
13	viable	viable		YGR170W	1 viable
14	viable	viable		YGR171C	1 viable
15	viable	viable		YGR177C	1 viable
16	viable	viable		YGR180C	1 viable
17	viable	viable		YGR183C	0.2095 viable
18	viable	viable		YGR192C	1 viable
19	viable	viable		YGR193C	0.9909 viable
20	viable	viable		YGR194C	1 viable
21	viable	viable		YGR202C	1 viable
22	viable	viable		YGR208W	0.9848 viable
23	viable	viable		YGR209C	1 viable
24	viable	viable		YGR240C	0.9717 viable
25	viable	viable		YGR243W	1 viable
26	viable	viable		YGR247W	1 viable
27	viable	viable		YGR248W	1 viable
28	viable	viable		YGR254W	1 viable
29	viable	viable		YGR255C	1 viable
30	viable	viable		YGR256W	1 viable
31	viable	viable		YGR260W	1 viable
32	viable	viable		YGR282C	1 viable
33	viable	viable		YGR286C	1 viable
34	viable	viable		YGR287C	1 viable
35	viable	viable		YGR289C	1 viable
36	viable	viable		YGR292W	1 viable
37	viable	viable		YHL003C	1 viable
38	viable	viable		YHL011C	1 viable
39	viable	viable		YHL016C	1 viable
40	viable	viable		YHL032C	1 viable
41	viable	viable		YHL036W	1 viable
42	viable	viable		YHL040C	1 viable
43	viable	viable		YHL047C	1 viable
44	viable	viable		YHR001W-	0.2095 viable
45	viable	viable		YHR002W	0.9994 viable
46	viable	viable		YHR011W	1 viable
47	viable	viable		YHR026W	1 viable
48	viable	viable		YHR037W	1 viable
49	viable	viable		YHR039C-A	1 viable
50	viable	viable		YHR046C	1 viable
51	viable	viable		YHR051W	0.2083 viable
52					
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57					
58					
59					
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1					
2	viable	viable		YHR063C	1 viable
3	viable	viable		YHR067W	1 viable
4	viable	viable		YHR091C	1 viable
5	viable	viable		YHR092C	1 viable
6	viable	viable		YHR094C	1 viable
7	viable	viable		YHR096C	1 viable
8	viable	viable		YHR100C	1 viable
9	viable	viable		YHR104W	1 viable
10	viable	viable		YHR106W	1 viable
11	viable	viable		YHR123W	1 viable
12	viable	viable		YHR137W	0.9997 viable
13	viable	viable		YHR144C	1 viable
14	viable	viable		YHR162W	1 viable
15	viable	viable		YHR163W	1 viable
16	viable	viable		YHR174W	1 viable
17	viable	viable		YHR183W	1 viable
18	viable	viable		YHR208W	0.9996 viable
19	viable	viable		YHR216W	1 viable
20	viable	viable		YIL002C	1 viable
21	viable	viable		YIL006W	1 viable
22	viable	viable		YIL009W	1 viable
23	viable	viable		YIL010W	1 viable
24	viable	viable		YIL013C	1 viable
25	viable	viable		YIL053W	1 viable
26	viable	viable		YIL066C	1 viable
27	viable	viable		YIL074C	1 viable
28	viable	viable		YIL099W	1 viable
29	viable	viable		YIL107C	1 viable
30	viable	viable		YIL111W	1 viable
31	viable	viable		YIL124W	1 viable
32	viable	viable		YIL125W	1 viable
33	viable	viable		YIL128W	1 viable
34	viable	viable		YIL134W	1 viable
35	viable	viable		YIL145C	1 viable
36	viable	viable		YIL155C	1 viable
37	viable	viable		YIL160C	1 viable
38	viable	viable		YIL162W	1 viable
39	viable	viable		YIL172C	1 viable
40	viable	viable		YIR027C	1 viable
41	viable	viable		YIR028W	1 viable
42	viable	viable		YIR029W	1 viable
43	viable	viable		YIR031C	1 viable
44	viable	viable		YIR032C	1 viable
45	viable	viable		YIR037W	1 viable
46	viable	viable		YJL045W	1 viable
47	viable	viable		YJL052W	1 viable
48	viable	viable		YJL060W	1 viable
49	viable	viable		YJL068C	1 viable
50	viable	viable		YJL071W	1 viable
51	viable	viable		YJL100W	1 viable
52					
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54					
55					
56					
57					
58					
59					
60					

1					
2	viable	viable		YJL101C	1 viable
3	viable	viable		YJL121C	0.9991 viable
4	viable	viable		YJL129C	1 viable
5	viable	viable		YJL133W	1 viable
6	viable	viable		YJL134W	1 viable
7	viable	viable		YJL137C	1 viable
8	viable	viable		YJL139C	1 viable
9	viable	viable		YJL155C	1 viable
10	viable	viable		YJL166W	0.2095 viable
11	viable	viable		YJL196C	1 viable
12	viable	viable		YJL212C	1 viable
13	viable	viable		YJL214W	1 viable
14	viable	viable		YJL216C	1 viable
15	viable	viable		YJL219W	1 viable
16	viable	viable		YJL221C	1 viable
17	viable	viable		YJR001W	1 viable
18	viable	viable		YJR009C	1 viable
19	viable	viable		YJR010W	1 viable
20	viable	viable		YJR019C	1 viable
21	viable	viable		YJR048W	1 viable
22	viable	viable		YJR077C	1 viable
23	viable	viable		YJR103W	1 viable
24	viable	viable		YJR105W	0.9999 viable
25	viable	viable		YJR109C	1 viable
26	viable	viable		YJR110W	1 viable
27	viable	viable		YJR121W	0.398 viable
28	viable	viable		YJR122W	1 viable
29	viable	viable		YJR130C	1 viable
30	viable	viable		YJR133W	1 viable
31	viable	viable		YJR143C	1 viable
32	viable	viable		YJR148W	0.9993 viable
33	viable	viable		YJR152W	1 viable
34	viable	viable		YJR153W	1 viable
35	viable	viable		YJR158W	1 viable
36	viable	viable		YJR159W	1 viable
37	viable	viable		YJR160C	1 viable
38	viable	viable		YKL008C	1 viable
39	viable	viable		YKL016C	0.398 viable
40	viable	viable		YKL026C	1 viable
41	viable	viable		YKL029C	1 viable
42	viable	viable		YKL040C	1 viable
43	viable	viable		YKL055C	1 viable
44	viable	viable		YKL080W	1 viable
45	viable	viable		YKL085W	0.9988 viable
46	viable	viable		YKL094W	1 viable
47	viable	viable		YKL106W	1 viable
48	viable	viable		YKL120W	1 viable
49	viable	viable		YKL127W	1 viable
50	viable	viable		YKL132C	1 viable
51	viable	viable		YKL140W	1 viable
52					
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56					
57					
58					
59					
60					

1					
2	viable	viable		YKL146W	1 viable
3	viable	viable		YKL148C	1 viable
4	viable	viable		YKL174C	1 viable
5	viable	viable		YKL181W	1 viable
6	viable	viable		YKL184W	1 viable
7	viable	viable		YKL188C	1 viable
8	viable	viable		YKL194C	1 viable
9	viable	viable		YKL212W	1 viable
10	viable	viable		YKL217W	1 viable
11	viable	viable		YKL220C	1 viable
12	viable	viable		YKR009C	1 viable
13	viable	viable		YKR031C	1 viable
14	viable	viable		YKR039W	1 viable
15	viable	viable		YKR043C	1 viable
16	viable	viable		YKR052C	1 viable
17	viable	viable		YKR053C	1 viable
18	viable	viable		YKR058W	1 viable
19	viable	viable		YKR061W	1 viable
20	viable	viable		YKR066C	1 viable
21	viable	viable		YKR067W	1 viable
22	viable	viable		YKR069W	1 viable
23	viable	viable		YKR072C	1 viable
24	viable	viable		YKR080W	1 viable
25	viable	viable		YKR089C	1 viable
26	viable	viable		YKR097W	1 viable
27	viable	viable		YLL012W	1 viable
28	viable	viable		YLL015W	1 viable
29	viable	viable		YLL027W	1 viable
30	viable	viable		YLL028W	1 viable
31	viable	viable		YLL041C	0.9945 viable
32	viable	viable		YLL043W	1 viable
33	viable	viable		YLL048C	1 viable
34	viable	viable		YLL051C	1 viable
35	viable	viable		YLL052C	1 viable
36	viable	viable		YLL057C	1 viable
37	viable	viable		YLL061W	1 viable
38	viable	viable		YLL062C	1 viable
39	viable	viable		YLR011W	1 viable
40	viable	viable		YLR017W	1 viable
41	viable	viable		YLR020C	1 viable
42	viable	viable		YLR028C	1 viable
43	viable	viable		YLR034C	1 viable
44	viable	viable		YLR038C	0.2083 viable
45	viable	viable		YLR043C	1 viable
46	viable	viable		YLR044C	1 viable
47	viable	viable		YLR056W	1 viable
48	viable	viable		YLR058C	0.9863 viable
49	viable	viable		YLR070C	1 viable
50	viable	viable		YLR081W	1 viable
51	viable	viable		YLR089C	1 viable
52					
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57					
58					
59					
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1					
2	viable	viable		YLR092W	1 viable
3	viable	viable		YLR109W	1 viable
4	viable	viable		YLR133W	1 viable
5	viable	viable		YLR134W	1 viable
6	viable	viable		YLR138W	1 viable
7	viable	viable		YLR142W	1 viable
8	viable	viable		YLR146C	1 viable
9	viable	viable		YLR155C	1 viable
10	viable	viable		YLR157C	1 viable
11	viable	viable		YLR158C	1 viable
12	viable	viable		YLR160C	1 viable
13	viable	viable		YLR172C	1 viable
14	viable	viable		YLR174W	0.9999 viable
15	viable	viable		YLR180W	1 viable
16	viable	viable		YLR189C	1 viable
17	viable	viable		YLR201C	1 viable
18	viable	viable		YLR205C	1 viable
19	viable	viable		YLR209C	1 viable
20	viable	viable		YLR214W	1 viable
21	viable	viable		YLR237W	1 viable
22	viable	viable		YLR245C	1 viable
23	viable	viable		YLR258W	1 viable
24	viable	viable		YLR260W	1 viable
25	viable	viable		YLR284C	1 viable
26	viable	viable		YLR285W	1 viable
27	viable	viable		YLR295C	0.398 viable
28	viable	viable		YLR299W	1 viable
29	viable	viable		YLR300W	1 viable
30	viable	viable		YLR307W	1 viable
31	viable	viable		YLR308W	1 viable
32	viable	viable		YLR328W	1 viable
33	viable	viable		YLR342W	1 viable
34	viable	viable		YLR348C	1 viable
35	viable	viable		YLR354C	0.9999 viable
36	viable	viable		YLR369W	1 viable
37	viable	viable		YLR372W	1 viable
38	viable	viable		YLR377C	1 viable
39	viable	viable		YLR382C	1 viable
40	viable	viable		YLR386W	1 viable
41	viable	viable		YLR395C	0.2083 viable
42	viable	viable		YLR410W	1 viable
43	viable	viable		YLR432W	1 viable
44	viable	viable		YLR438W	0.9998 viable
45	viable	viable		YLR447C	1 viable
46	viable	viable		YLR450W	1 viable
47	viable	viable		YML004C	1 viable
48	viable	viable		YML022W	1 viable
49	viable	viable		YML035C	1 viable
50	viable	viable		YML042W	1 viable
51	viable	viable		YML054C	1 viable
52					
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57					
58					
59					
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1					
2	viable	viable		YML056C	1 viable
3	viable	viable		YML059C	1 viable
4	viable	viable		YML070W	1 viable
5	viable	viable		YML075C	1 viable
6	viable	viable		YML081C- ^A	0.398 viable
7	viable	viable		YML086C	1 viable
8	viable	viable		YML100W	1 viable
9	viable	viable		YML106W	1 viable
10	viable	viable		YML110C	1 viable
11	viable	viable		YML120C	1 viable
12	viable	viable		YML123C	1 viable
13	viable	viable		YMR006C	1 viable
14	viable	viable		YMR008C	1 viable
15	viable	viable		YMR009W	1 viable
16	viable	viable		YMR011W	1 viable
17	viable	viable		YMR015C	1 viable
18	viable	viable		YMR020W	1 viable
19	viable	viable		YMR041C	1 viable
20	viable	viable		YMR054W	1 viable
21	viable	viable		YMR056C	1 viable
22	viable	viable		YMR058W	1 viable
23	viable	viable		YMR083W	1 viable
24	viable	viable		YMR088C	1 viable
25	viable	viable		YMR101C	1 viable
26	viable	viable		YMR105C	1 viable
27	viable	viable		YMR120C	1 viable
28	viable	viable		YMR145C	1 viable
29	viable	viable		YMR165C	1 viable
30	viable	viable		YMR169C	1 viable
31	viable	viable		YMR170C	1 viable
32	viable	viable		YMR189W	0.9874 viable
33	viable	viable		YMR205C	0.9717 viable
34	viable	viable		YMR207C	1 viable
35	viable	viable		YMR226C	1 viable
36	viable	viable		YMR241W	1 viable
37	viable	viable		YMR246W	1 viable
38	viable	viable		YMR250W	1 viable
39	viable	viable		YMR256C	0.2083 viable
40	viable	viable		YMR261C	1 viable
41	viable	viable		YMR267W	0.9912 viable
42	viable	viable		YMR271C	1 viable
43	viable	viable		YMR272C	1 viable
44	viable	viable		YMR278W	1 viable
45	viable	viable		YMR289W	1 viable
46	viable	viable		YMR293C	1 viable
47	viable	viable		YMR303C	1 viable
48	viable	viable		YMR313C	1 viable
49	viable	viable		YMR318C	1 viable
50	viable	viable		YNL003C	1 viable
51	viable	viable		YNL009W	1 viable
52					
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57					
58					
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1					
2	viable	viable		YNL029C	1 viable
3	viable	viable		YNL037C	1 viable
4	viable	viable		YNL045W	1 viable
5	viable	viable		YNL052W	1 viable
6	viable	viable		YNL071W	0.9909 viable
7	viable	viable		YNL073W	1 viable
8	viable	viable		YNL101W	1 viable
9	viable	viable		YNL104C	0.9988 viable
10	viable	viable		YNL106C	1 viable
11	viable	viable		YNL117W	1 viable
12	viable	viable		YNL129W	1 viable
13	viable	viable		YNL130C	1 viable
14	viable	viable		YNL141W	1 viable
15	viable	viable		YNL142W	1 viable
16	viable	viable		YNL169C	1 viable
17	viable	viable		YNL192W	1 viable
18	viable	viable		YNL202W	1 viable
19	viable	viable		YNL259C	1 viable
20	viable	viable		YNL268W	1 viable
21	viable	viable		YNL270C	1 viable
22	viable	viable		YNL292W	1 viable
23	viable	viable		YNL318C	1 viable
24	viable	viable		YNL325C	1 viable
25	viable	viable		YNR001C	1 viable
26	viable	viable		YNR008W	1 viable
27	viable	viable		YNR012W	1 viable
28	viable	viable		YNR013C	1 viable
29	viable	viable		YNR019W	1 viable
30	viable	viable		YNR033W	1 viable
31	viable	viable		YNR041C	1 viable
32	viable	viable		YNR056C	1 viable
33	viable	viable		YNR057C	1 viable
34	viable	viable		YNR058W	1 viable
35	viable	viable		YNR060W	1 viable
36	viable	viable		YNR067C	1 viable
37	viable	viable		YNR072W	1 viable
38	viable	viable		YOL011W	1 viable
39	viable	viable		YOL020W	1 viable
40	viable	viable		YOL033W	1 viable
41	viable	viable		YOL049W	1 viable
42	viable	viable		YOL052C	1 viable
43	viable	viable		YOL055C	1 viable
44	viable	viable		YOL059W	1 viable
45	viable	viable		YOL061W	1 viable
46	viable	viable		YOL064C	0.991 viable
47	viable	viable		YOL065C	1 viable
48	viable	viable		YOL068C	1 viable
49	viable	viable		YOL086C	1 viable
50	viable	viable		YOL096C	1 viable
51	viable	viable		YOL103W	1 viable
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1					
2	viable	viable		YOL126C	0.9997 viable
3	viable	viable		YOL136C	1 viable
4	viable	viable		YOL151W	1 viable
5	viable	viable		YOL156W	1 viable
6	viable	viable		YOL158C	1 viable
7	viable	viable		YOR011W	1 viable
8	viable	viable		YOR025W	1 viable
9	viable	viable		YOR040W	1 viable
10	viable	viable		YOR054C	1 viable
11	viable	viable		YOR065W	0.2095 viable
12	viable	viable		YOR071C	1 viable
13	viable	viable		YOR081C	1 viable
14	viable	viable		YOR099W	1 viable
15	viable	viable		YOR100C	1 viable
16	viable	viable		YOR108W	1 viable
17	viable	viable		YOR109W	1 viable
18	viable	viable		YOR120W	1 viable
19	viable	viable		YOR125C	1 viable
20	viable	viable		YOR126C	1 viable
21	viable	viable		YOR136W	1 viable
22	viable	viable		YOR142W	1 viable
23	viable	viable		YOR155C	1 viable
24	viable	viable		YOR163W	1 viable
25	viable	viable		YOR171C	1 viable
26	viable	viable		YOR175C	1 viable
27	viable	viable		YOR180C	1 viable
28	viable	viable		YOR184W	0.9848 viable
29	viable	viable		YOR190W	1 viable
30	viable	viable		YOR192C	1 viable
31	viable	viable		YOR209C	1 viable
32	viable	viable		YOR221C	1 viable
33	viable	viable		YOR222W	1 viable
34	viable	viable		YOR226C	1 viable
35	viable	viable		YOR241W	1 viable
36	viable	viable		YOR245C	1 viable
37	viable	viable		YOR270C	1 viable
38	viable	viable		YOR273C	1 viable
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40	viable	viable		YOR311C	1 viable
41	viable	viable		YOR317W	1 viable
42	viable	viable		YOR321W	1 viable
43	viable	viable		YOR323C	1 viable
44	viable	viable		YOR332W	1 viable
45	viable	viable		YOR347C	1 viable
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48	viable	viable		YOR374W	1 viable
49	viable	viable		YOR375C	1 viable
50	viable	viable		YOR377W	1 viable
51	viable	viable		YOR381W	1 viable
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2	viable	viable		YOR382W	1 viable
3	viable	viable		YOR383C	1 viable
4	viable	viable		YOR384W	1 viable
5	viable	viable		YOR388C	0.9872 viable
6	viable	viable		YPL015C	1 viable
7	viable	viable		YPL023C	1 viable
8	viable	viable		YPL036W	1 viable
9	viable	viable		YPL040C	1 viable
10	viable	viable		YPL053C	1 viable
11	viable	viable		YPL057C	1 viable
12				YPL059W	1 viable
13				YPL061W	0.9997 viable
14				YPL069C	1 viable
15				YPL078C	0.398 viable
16				YPL087W	1 viable
17				YPL091W	1 viable
18				YPL092W	1 viable
19				YPL097W	1 viable
20				YPL104W	1 viable
21				YPL110C	1 viable
22				YPL111W	1 viable
23				YPL134C	1 viable
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27				YPL188W	1 viable
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29				YPL202C	1 viable
30				YPL206C	1 viable
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32				YPL214C	1 viable
33				YPL234C	1 viable
34				YPL244C	1 viable
35				YPL258C	1 viable
36				YPL262W	0.9693 viable
37				YPL265W	1 viable
38				YPL271W	0.398 viable
39				YPL273W	1 viable
40				YPL274W	1 viable
41				YPR001W	1 viable
42				YPR002W	1 viable
43				YPR006C	1 viable
44				YPR020W	1 viable
45				YPR021C	0.9993 viable
46				YPR026W	1 viable
47				YPR036W	1 viable
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49				YPR062W	1 viable
50				YPR067W	1 viable
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YPR074C	1 viable
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YPR121W	1 viable
YPR128C	1 viable
YPR138C	1 viable
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YPR145W	1 viable
YPR156C	1 viable
YPR159W	1 viable
YPR160W	1 viable
YPR184W	1 viable
YPR191W	0.2095 viable
YPR192W	1 viable
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For Peer Review

	reactions requiring Fe- containing cofactors	reaction flux (g biomass) ⁻¹ hr ⁻¹	(mmol required	number of cofactors required	total stoichiometry for cofactors required
1	r_0001	0	1	1E-14	
2	r_0002	0	1	1E-14	
3	r_0004	0	2	2E-14	
4	r_0023	-0.026077326	1	1E-14	
5	r_0027	0.025179928	1	1E-14	
6	r_0060	-0.026077326	1	1E-14	
7	r_0229	0	2	2E-14	
8	r_0233	0	1	1E-14	
9	r_0238	0.000594922	2	2E-14	
10	r_0239	0.000594922	2	2E-14	
11	r_0240	0.000594922	2	2E-14	
12	r_0241	0.000594922	2	2E-14	
13	r_0242	0	2	2E-14	
14	r_0255	0	1	1E-14	
15	r_0256	0	1	1E-14	
16	r_0259	0	2	2E-14	
17	r_0260	0	2	2E-14	
18	r_0261	0	2	2E-14	
19	r_0262	0	2	2E-14	
20	r_0267	0	2	2E-14	
21	r_0268	0	2	2E-14	
22	r_0269	0	2	2E-14	
23	r_0270	0	2	2E-14	
24	r_0280	-999.9050606	1	1E-14	
25	r_0302	-999.9050606	1	1E-14	
26	r_0317	0.000599849	1	1E-14	
27	r_0352	0.049356881	1	1E-14	
28	r_0437	0	2	2E-14	
29	r_0438	1.909945527	2	2E-14	
30	r_0439	3.819891055	5	5E-14	
31	r_0472	0	1	1E-14	
32	r_0530	8.79802E-08	1	1E-14	
33	r_0542	0.025179928	1	1E-14	
34	r_0694	0.015123793	1	1E-14	
35	r_0761	0	1	1E-14	
36	r_0763	0	1	1E-14	
37	r_0920	0	1	1E-14	
38	r_0922	0	2	2E-14	
39	r_0974	0.000316729	2	2E-14	
40	r_0975	0	2	2E-14	
41	r_0976	0.000493482	2	2E-14	
42	r_0977	0	2	2E-14	
43	r_0978	0.000211152	2	2E-14	
44	r_0979	0	2	2E-14	
45	r_1021	0.009730608	4	4E-14	
46	r_1027	0.005041264	2	2E-14	

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2	r_2182	0.000843257	2	2E-14
3	r_2183	7.14399E-05	2	2E-14
4	r_2305	999.9946955	1	1E-14
5	total			
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4	cofactor flux	(mmol max reaction flux	max cofactor flux
5	(g biomass)-1 hr-1)	(mmol (g biomass)-1 hr-1)	(mmol (g biomass)-1 hr-1)
6		0	1.92101E-05
7		0	1.92101E-05
8		0	1.62798E-05
9			3.25595E-19
10	2.60773E-16	-0.026077272	2.60773E-16
11	2.51799E-16	0.02518144	2.51814E-16
12	2.60773E-16	-0.026077272	2.60773E-16
13	0	0	0
14	0	1.23142E-05	1.23142E-19
15	1.18984E-17	0.000598231	1.19646E-17
16	1.18984E-17	0.000598231	1.19646E-17
17	1.18984E-17	0.000598231	1.19646E-17
18	1.18984E-17	0.000598231	1.19646E-17
19	0	1.23142E-05	2.46283E-19
20	0	4.66719E-07	4.66719E-21
21	0	6.6356E-06	6.6356E-20
22	0	2.46284E-05	4.92568E-19
23	0	2.46284E-05	4.92568E-19
24	0	2.46284E-05	4.92568E-19
25	0	2.46284E-05	4.92568E-19
26	0	1.17613E-05	2.35226E-19
27	0	1.23142E-05	2.46284E-19
28	0	7.95999E-06	1.592E-19
29	0	8.20946E-06	1.64189E-19
30	0	6.01569E-06	1.20314E-19
31	9.99905E-12	1000	1E-11
32	9.99905E-12	1000	1E-11
33	5.99849E-18	0.000603162	6.03162E-18
34	4.93569E-16	0.04935914	4.93591E-16
35	0	0	0
36	3.81989E-14	1.909953922	3.81991E-14
37	1.90995E-13	3.819907843	1.90995E-13
38	0	8.73188E-05	8.73188E-19
39	8.79802E-22	8.79801E-08	8.79801E-22
40	2.51799E-16	0.02518144	2.51814E-16
41	1.51238E-16	0.015130123	1.51301E-16
42	0	0	0
43	0	5.56171E-07	5.56171E-21
44	0	1000	1E-11
45	0	2.46283E-05	4.92566E-19
46	6.33457E-18	0.000316729	6.33457E-18
47	0	0	0
48	9.86964E-18	0.000528875	1.05775E-17
49	0	0	0
50	4.22305E-18	0.000211152	4.22305E-18
51	0	0	0
52	3.89224E-16	3.819907843	1.52796E-13
53	1.00825E-16	0.00504139	1.00828E-16
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2	1.68651E-17	0.000926254	1.85251E-17
3	1.4288E-18	0.000152495	3.0499E-18
4	9.99995E-12	999.9948876	9.99995E-12
5	3.02295E-11		4.03838E-11
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min reaction flux	min cofactor flux
(mmol (g biomass)-1 hr-1)	(mmol (g biomass)-1 hr-1)
0	0
0	0
0	0
-0.026079081	2.60791E-16
0.025179876	2.51799E-16
-0.026079081	2.60791E-16
0	0
0	0
0.000594921	1.18984E-17
0.000594921	1.18984E-17
0.000594921	1.18984E-17
0.000594921	1.18984E-17
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
-999.9052529	9.99905E-12
-999.9052529	9.99905E-12
0.000599848	5.99848E-18
0.04935678	4.93568E-16
0	0
1.909927035	3.81985E-14
3.81985407	1.90993E-13
0	0
8.798E-08	8.798E-22
0.025179876	2.51799E-16
0.015123762	1.51238E-16
0	0
0	0
0	0
0	0
0	0
0.000429447	8.58894E-18
0	0
0.000163127	3.26253E-18
0	0
0.009726273	3.89051E-16
0.005041254	1.00825E-16

0.000758148	1.5163E-17
0	0
-999.910366	9.9991E-12
	3.02286E-11

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3			significant		
4	mutant (average		difference		standard
5	of triplicate runs)	μ_{avg} (h ⁻¹)	(p<0.01) (Y/N)	μ_{avg} (h ⁻¹)	deviation
6	<i>ARH1/Δarh1</i>	0.439	N	0.431	0.014
7	<i>ATM1/Δatm1</i>	0.418	N		
8	<i>HO/Δho</i>	0.447	-		
9	<i>YFH1/Δyfh1</i>	0.421	N		
10					
11					
12					
13	cellular /		haem		significant
14	extracellular	mutant (average	concentration	standard deviation	difference
15	compartment	of triplicate runs)	(μg/OD)	among replicates	(p<0.01) (Y/N)
16	cytoplasm	<i>ARH1/Δarh1</i>	16.8836	0.3263	N
17		<i>ATM1/Δatm1</i>	15.4249	0.1450	N
18		<i>HO/Δho</i>	14.2705	0.0692	-
19		<i>YFH1/Δyfh1</i>	15.0824	0.1622	N
20	particulate	<i>ARH1/Δarh1</i>	23.3085	1.3504	N
21		<i>ATM1/Δatm1</i>	30.8894	1.7711	N
22		<i>HO/Δho</i>	7.9162	0.1235	-
23		<i>YFH1/Δyfh1</i>	10.4874	0.2870	N
24	mitochondria	<i>ARH1/Δarh1</i>	0.3695	0.0069	N
25		<i>ATM1/Δatm1</i>	0.4350	0.0027	N
26		<i>HO/Δho</i>	0.5778	0.0203	-
27		<i>YFH1/Δyfh1</i>	0.4558	0.0103	N
28	vacuole	<i>ARH1/Δarh1</i>	0.0218	0.0002	N
29		<i>ATM1/Δatm1</i>	0.0415	0.0003	N
30		<i>HO/Δho</i>	0.0335	0.0008	-
31		<i>YFH1/Δyfh1</i>	0.0207	0.0001	N
32	supernatant	<i>ARH1/Δarh1</i>	4.0856	0.0686	N
33		<i>ATM1/Δatm1</i>	3.2910	0.0227	N
34		<i>HO/Δho</i>	3.0788	0.0586	-
35		<i>YFH1/Δyfh1</i>	3.6044	0.0777	N
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glucose consumption (g/L)	average glucose consumption (g/L)	standard deviation	significant difference (p<0.01) (Y/N)	ammonia consumption (g/L)
21.584	21.628	0.029	N	0.044
21.641			N	0.044
21.640			-	0.038
21.646			N	0.035
copper concentration (µg/OD)	standard deviation among replicates	significant difference (p<0.01) (Y/N)	Total Fe concentration (µg/OD)	deviation among replicates
5.5889	1.5515	N	0.0124	0.0047
5.6500	0.0236	Y	0.0055	0.0028
6.6000	0.2028	-	0.0046	0.0003
7.6111	1.2366	N	0.0028	0.0006
2.7514	0.4369	Y	0.0140	0.0085
3.4319	1.1820	N	0.0103	0.0075
0.5005	0.4841	-	0.0076	0.0020
1.7855	0.5275	N	0.0084	0.0049
0.2830	0.0469	Y	0.0001	0.0000
0.3998	0.0457	Y	0.0001	0.0000
0.1099	0.0062	-	0.0001	0.0000
0.3378	0.0587	Y	0.0000	0.0000
0.0235	0.0026	Y	0.0000	0.0000
0.0062	0.0003	Y	0.0000	0.0000
0.0404	0.0025	-	0.0000	0.0000
0.0243	0.0004	N	0.0000	0.0000
4.6916	0.1612	Y	0.0024	0.0015
1.4140	0.1270	Y	0.0026	0.0019
1.7467	0.0141	-	0.0036	0.0017
1.3908	0.2024	N	0.0009	0.0006

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average ammonia consumption (g/L)	standard deviation	significant difference (p<0.01) (Y/N)	ethanol production (g/L)	average ethanol production (g/L)
0.040	0.004	N	7.769	7.464
		N	8.126	
		-	7.149	
		N	6.812	

significant difference (p<0.01) (Y/N)	Fe ³⁺ concentration (µg/OD)	standard deviation among replicates	significant difference (p<0.01) (Y/N)	Fe ²⁺ concentration (µg/OD)
N	0.0037	0.0014	N	0.0147
N	0.0041	0.0031	N	0.0023
-	0.0015	0.0014	-	0.0046
N	0.0002	0.0003	N	0.0047
N	0.0076	0.0079	N	0.0079
N	0.0037	0.0041	N	0.0088
-	0.0065	0.0025	-	0.0011
N	0.0050	0.0037	N	0.0070
N	0.0000	0.0000	N	0.0001
N	0.0000	0.0000	N	0.0001
-	0.0000	0.0000	-	0.0001
N	0.0000	0.0000	N	0.0001
N	0.0000	0.0000	N	0.0000
N	0.0000	0.0000	N	0.0000
-	0.0000	0.0000	-	0.0000
N	0.0000	0.0000	N	0.0000
N	0.0000	0.0000	N	0.0029
N	0.0008	0.0012	N	0.0030
-	0.0013	0.0012	-	0.0039
N	0.0007	0.0012	N	0.0017

standard deviation	significant difference (p<0.01) (Y/N)	glycerol production (g/L)	average glycerol production (g/L)	standard deviation	significant difference (p<0.01) (Y/N)
0.593	N	0.354	0.372	0.023	N
	N	0.405			N
	-	0.357			-
	N	0.372			N
deviation among replicates	significant difference (p<0.01) (Y/N)				
0.0035	N				
0.0007	N				
0.0030	-				
0.0033	N				
0.0008	Y				
0.0017	Y				
0.0006	-				
0.0028	N				
0.0000	N				
0.0000	N				
0.0000	-				
0.0000	N				
0.0000	N				
0.0000	N				
0.0000	-				
0.0000	N				
0.0015	N				
0.0007	N				
0.0012	-				
0.0010	N				

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2		Flux				
3	reactions	Zero	Input the parameters to calculate the p-value for under- or over-			
4	catalysed by	(Z) or	enrichment based on the cumulative distribution function (CDF) of			
5	enzymes	non-	the hypergeometric distribution (number of successes-k, sample			
6	encoded from	zero	size-s, number of successes in the population-M, population size-			
7	essential genes	(NZ)	N)			
8	r_0280	Z	zero flux reactions	820	Parameters	
9	r_0302	Z	total no of rxns	3600	expected n	
10	r_0446	Z	inviabiles among non-zero	195	the results	
11	r_0723	Z	inviabiles	369	hypergeom	
12	r_0902	Z				
13	r_0023	Z		Y7.Fe	Y7.6	
14	r_0060	Z	total no of genes	963	908	
15	r_0349	Z	essential among all (FP+TN)	174	156	
16	r_0330	Z	essential prediction (TN+FN)	164	159	
17	r_0942	Z	essential (TN)	84	83	
18	r_0304	Z				
19	r_0436	Z				
20	r_0477	Z				
21	r_0530	Z				
22	r_0531	Z				
23	r_0557	Z		Y7.Fe	Y7.6	
24	r_1081	Z	essential among all (FP+TN)	174	156	
25	r_1083	Z	essential (TN)	84	83	
26	r_1290	Z	essential prediction (TN+FN)	164	159	
27	r_0760	Z	essential (TN)	84	83	
28	r_0882	Z				
29	r_1069	Z				
30	r_0935	Z				
31	r_0081	Z				
32	r_0243	Z				
33	r_0986	Z				
34	r_3452	Z				
35	r_0041	Z				
36	r_0993	Z				
37	r_3428	Z				
38	r_2164	Z				
39	r_2165	Z				
40	r_2166	Z				
41	r_2171	Z				
42	r_2172	Z				
43	r_2173	Z				
44	r_2178	Z				
45	r_2179	Z				
46	r_2180	Z				
47	r_2183	Z				
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2	r_0014	Z
3	r_0015	Z
4	r_0525	Z
5	r_0968	Z
6	r_2141	Z
7	r_0038	Z
8	r_0967	Z
9	r_0758	Z
10	r_0529	Z
11	r_0796	Z
12	r_2454	Z
13	r_0344	Z
14	r_1045	Z
15	r_2488	Z
16	r_2496	Z
17	r_2504	Z
18	r_2446	Z
19	r_0244	Z
20	r_0313	Z
21	r_0234	Z
22	r_0235	Z
23	r_0236	Z
24	r_0237	Z
25	r_0238	Z
26	r_0239	Z
27	r_0240	Z
28	r_0241	Z
29	r_0231	Z
30	r_0317	Z
31	r_0698	Z
32	r_1011	Z
33	r_1012	Z
34	r_2182	Z
35	r_2432	Z
36	r_0667	Z
37	r_0355	Z
38	r_0462	Z
39	r_0144	Z
40	r_2140	Z
41	r_0195	Z
42	r_1051	Z
43	r_1057	Z
44	r_0104	Z
45	r_0560	Z
46	r_0736	Z
47	r_0739	Z
48	r_0904	Z
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2	r_0514	Z
3	r_0729	Z
4	r_1072	Z
5	r_0154	Z
6	r_0549	Z
7	r_0813	Z
8	r_0883	Z
9	r_1027	Z
10	r_0007	Z
11	r_0225	Z
12	r_0536	Z
13	r_0537	Z
14	r_0538	Z
15	r_0539	Z
16	r_0563	Z
17	r_0564	Z
18	r_0909	Z
19	r_0910	Z
20	r_1038	Z
21	r_0727	Z
22	r_0212	Z
23	r_0939	Z
24	r_1066	Z
25	r_0478	Z
26	r_0214	Z
27	r_0453	Z
28	r_0821	Z
29	r_0852	Z
30	r_0938	Z
31	r_0109	Z
32	r_0209	Z
33	r_0816	Z
34	r_0207	Z
35	r_0208	Z
36	r_0941	Z
37	r_0957	Z
38	r_0045	Z
39	r_0058	Z
40	r_0671	Z
41	r_0694	Z
42	r_0762	Z
43	r_0768	Z
44	r_0786	Z
45	r_1042	Z
46	r_0016	Z
47	r_0353	Z
48	r_0665	Z
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2	r_0669	Z
3	r_0202	Z
4	r_0203	Z
5	r_0566	Z
6	r_0913	Z
7	r_1055	Z
8	r_0278	Z
9	r_1089	Z
10	r_0079	Z
11	r_0151	Z
12	r_0499	Z
13	r_0855	Z
14	r_0908	Z
15	r_0911	Z
16	r_0914	Z
17	r_0915	Z
18	r_0250	Z
19	r_0545	Z
20	r_0678	Z
21	r_0711	Z
22	r_0988	Z
23	r_0989	Z
24	r_0027	Z
25	r_0542	Z
26	r_0153	Z
27	r_0152	Z
28	r_0061	Z
29	r_0701	Z
30	r_0220	Z
31	r_0479	Z
32	r_0115	Z
33	r_0118	Z
34	r_0759	Z
35	r_0818	Z
36	r_1237	Z
37	r_0548	Z
38	r_1041	Z
39	r_0215	Z
40	r_0219	Z
41	r_0546	Z
42	r_0039	Z
43	r_0040	Z
44	r_0065	Z
45	r_0279	Z
46	r_0996	Z
47	r_0997	Z
48	r_0157	Z
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2	r_0096	Z
3	r_0097	Z
4	r_0352	Z
5	r_0982	Z
6	r_0361	Z
7	r_0722	Z
8	r_0800	Z
9	r_0476	Z
10	r_0811	Z
11	r_0148	Z
12	r_0725	Z
13	r_0732	Z
14	r_0303	Z
15	r_2305	Z
16	r_2455	NZ
17	r_2456	NZ
18	r_2457	NZ
19	r_2458	NZ
20	r_2459	NZ
21	r_2460	NZ
22	r_2461	NZ
23	r_0540	NZ
24	r_0103	NZ
25	r_0345	NZ
26	r_1291	NZ
27	r_0735	NZ
28	r_0737	NZ
29	r_0738	NZ
30	r_0761	NZ
31	r_0559	NZ
32	r_0312	NZ
33	r_0812	NZ
34	r_0670	NZ
35	r_0795	NZ
36	r_0797	NZ
37	r_0798	NZ
38	r_0799	NZ
39	r_0801	NZ
40	r_0802	NZ
41	r_0803	NZ
42	r_1073	NZ
43	r_1079	NZ
44	r_1080	NZ
45	r_0547	NZ
46	r_2489	NZ
47	r_2490	NZ
48	r_2491	NZ
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2	r_2492	NZ
3	r_2493	NZ
4	r_2494	NZ
5	r_2495	NZ
6	r_2497	NZ
7	r_2498	NZ
8	r_2499	NZ
9	r_2500	NZ
10	r_2501	NZ
11	r_2502	NZ
12	r_2503	NZ
13	r_2505	NZ
14	r_2506	NZ
15	r_2507	NZ
16	r_2508	NZ
17	r_2509	NZ
18	r_2510	NZ
19	r_2511	NZ
20	r_2168	NZ
21	r_2169	NZ
22	r_2170	NZ
23	r_2174	NZ
24	r_4042	NZ
25	r_0769	NZ
26	r_1010	NZ
27	r_1090	NZ
28	r_0787	NZ
29	r_0085	NZ
30	r_2447	NZ
31	r_2448	NZ
32	r_2449	NZ
33	r_2450	NZ
34	r_2451	NZ
35	r_2452	NZ
36	r_2453	NZ
37	r_0687	NZ
38	r_0890	NZ
39	r_0528	NZ
40	r_1349	NZ
41	r_1350	NZ
42	r_3429	NZ
43	r_3430	NZ
44	r_3431	NZ
45	r_3432	NZ
46	r_3433	NZ
47	r_3434	NZ
48	r_3435	NZ
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2	r_3436	NZ
3	r_3437	NZ
4	r_3438	NZ
5	r_3439	NZ
6	r_3440	NZ
7	r_3441	NZ
8	r_3442	NZ
9	r_3443	NZ
10	r_3444	NZ
11	r_3445	NZ
12	r_3446	NZ
13	r_3447	NZ
14	r_3448	NZ
15	r_3449	NZ
16	r_3450	NZ
17	r_3451	NZ
18	r_3453	NZ
19	r_3454	NZ
20	r_3455	NZ
21	r_3456	NZ
22	r_3457	NZ
23	r_3458	NZ
24	r_3459	NZ
25	r_3460	NZ
26	r_3461	NZ
27	r_3462	NZ
28	r_3463	NZ
29	r_3464	NZ
30	r_3465	NZ
31	r_3466	NZ
32	r_3467	NZ
33	r_3468	NZ
34	r_3469	NZ
35	r_3470	NZ
36	r_3471	NZ
37	r_3472	NZ
38	r_3473	NZ
39	r_3474	NZ
40	r_3475	NZ
41	r_3476	NZ
42	r_3477	NZ
43	r_3478	NZ
44	r_3479	NZ
45	r_3480	NZ
46	r_3481	NZ
47	r_3482	NZ
48	r_3483	NZ
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For Peer Review

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2	r_3484	NZ
3	r_3485	NZ
4	r_3486	NZ
5	r_3487	NZ
6	r_3488	NZ
7	r_3489	NZ
8	r_3490	NZ
9	r_3491	NZ
10	r_3492	NZ
11	r_3493	NZ
12	r_3494	NZ
13	r_3495	NZ
14	r_3496	NZ
15	r_3497	NZ
16	r_3498	NZ
17	r_3499	NZ
18	r_3500	NZ
19	r_3501	NZ
20	r_3502	NZ
21	r_3503	NZ
22	r_3504	NZ
23	r_3505	NZ
24	r_3506	NZ
25	r_3507	NZ
26	r_0230	NZ
27	r_2175	NZ
28	r_2176	NZ
29	r_2177	NZ
30	r_2181	NZ
31	r_0069	NZ
32	r_2161	NZ
33	r_2162	NZ
34	r_2163	NZ
35	r_2167	NZ
36	r_2433	NZ
37	r_2434	NZ
38	r_2435	NZ
39	r_2436	NZ
40	r_2437	NZ
41	r_2438	NZ
42	r_2439	NZ
43	r_2440	NZ
44	r_2441	NZ
45	r_2442	NZ
46	r_2443	NZ
47	r_2444	NZ
48	r_2445	NZ
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Parameters: 195, 820, 369, 3600
expected number of successes = 84.05
the results are over enriched 2.32 fold compared to expectations
hypergeometric p-value = 7.7367205422728e-41

Parameters: 84, 164, 174, 963
expected number of successes = 29.6323987538941
the results are over enriched 2.83 fold compared to expectations
hypergeometric p-value = 7.661691059333066e-28

Parameters: 83, 159, 156, 908
expected number of successes = 27.3171806167401
the results are over enriched 3.04 fold compared to expectations
hypergeometric p-value = 6.453753482369164e-31

Parameters: 83, 159, 83, 156
expected number of successes = 84.5961538461538
the results are under enriched 1.02 fold compared to expectations
hypergeometric p-value = -nan

Parameters: 84, 164, 84, 174
expected number of successes = 79.1724137931034
the results are over enriched 1.06 fold compared to expectations
hypergeometric p-value = 0.00106202501846495

	ARH1 : 1 copy		ARH1 : 2 copies		Reactions and
	flux per unit		flux per unit		with changing
	Rxn ID	glucose uptake	RxnID	glucose uptake	difference>0.0
5	r_0001	0	r_0001	0	r_0029
6	r_0002	0	r_0002	0	r_0030
7	r_0003	0	r_0003	0	r_0073
8	r_0004	0	r_0004	0	r_0074
9	r_0005	0.0499312	r_0005	0.099839909	r_0082
10	r_0006	0.0499312	r_0006	0.099839909	r_0088
11	r_0007	0.0029172	r_0007	0.005833086	r_0091
12	r_0012	0	r_0012	0	r_0104
13	r_0013	0	r_0013	0	r_0109
14	r_0014	4.36E-05	r_0014	8.71E-05	r_0112
15	r_0015	4.36E-05	r_0015	8.71E-05	r_0113
16	r_0016	0.0084788	r_0016	0.016953781	r_0127
17	r_0017	0	r_0017	0	r_0132
18	r_0018	0.0125928	r_0018	0.025179928	r_0142
19	r_0019	0	r_0019	0	r_0144
20	r_0020	0.0191928	r_0020	0.038376955	r_0149
21	r_0021	0	r_0021	0	r_0173
22	r_0022	0	r_0022	0	r_0216
23	r_0023	-0.0130416	r_0023	-0.026077326	r_0217
24	r_0024	0	r_0024	0	r_0226
25	r_0025	0.0130416	r_0025	0.026077326	r_0231
26	r_0026	0	r_0026	0	r_0234
27	r_0027	0.0125928	r_0027	0.025179928	r_0235
28	r_0028	0	r_0028	0	r_0236
29	r_0029	0.0130416	r_0029	0	r_0237
30	r_0030	0	r_0030	0.026077326	r_0238
31	r_0032	0.0025212	r_0032	0.005041264	r_0239
32	r_0033	0	r_0033	0	r_0240
33	r_0034	0	r_0034	0	r_0241
34	r_0035	0	r_0035	0	r_0244
35	r_0036	0	r_0036	0	r_0273
36	r_0037	0	r_0037	0	r_0274
37	r_0038	8.71E-05	r_0038	0.000174201	r_0280
38	r_0039	0.0191928	r_0039	0.038376955	r_0302
39	r_0040	0.0191928	r_0040	0.038376955	r_0303
40	r_0041	1.90E-05	r_0041	3.79E-05	r_0307
41	r_0042	0	r_0042	0	r_0317
42	r_0043	0	r_0043	0	r_0326
43	r_0044	0	r_0044	0	r_0355
44	r_0045	0.0075636	r_0045	0.015123793	r_0364
45	r_0057	0	r_0057	0	r_0366
46	r_0058	0.0075636	r_0058	0.015123793	r_0438
47	r_0059	0	r_0059	0	r_0439
48	r_0060	-0.0130416	r_0060	-0.026077326	r_0445
49	r_0061	0.0130416	r_0061	0.026077326	r_0446
50	r_0062	0	r_0062	0	r_0451
51	r_0063	0	r_0063	0	r_0452

1					
2	r_0064	0	r_0064	0	r_0462
3	r_0065	0.0191928	r_0065	0.038376955	r_0466
4	r_0066	0	r_0066	0	r_0467
5	r_0067	0	r_0067	0	r_0471
6	r_0068	0	r_0068	0	r_0486
7	r_0069	0	r_0069	0	r_0491
8	r_0070	0	r_0070	0	r_0492
9	r_0072	0	r_0072	0	r_0502
10	r_0073	-7.715393768	r_0073	0	r_0503
11	r_0074	7.715393768	r_0074	0	r_0505
12	r_0075	0	r_0075	0	r_0506
13	r_0076	0	r_0076	0	r_0507
14	r_0077	0	r_0077	0	r_0508
15	r_0078	0	r_0078	0	r_0528
16	r_0079	0.01191916	r_0079	0.023832951	r_0529
17	r_0080	0.003098741	r_0080	0.006194421	r_0558
18	r_0081	3.52E-07	r_0081	7.04E-07	r_0560
19	r_0082	7.715393768	r_0082	0	r_0568
20	r_0083	0	r_0083	0	r_0569
21	r_0084	0	r_0084	0	r_0667
22	r_0085	0	r_0085	0	r_0674
23	r_0086	0	r_0086	0	r_0698
24	r_0087	0	r_0087	0	r_0699
25	r_0088	-7.715393768	r_0088	0	r_0700
26	r_0089	0	r_0089	0	r_0713
27	r_0090	0	r_0090	0	r_0714
28	r_0091	3.852593286	r_0091	0.029945102	r_0725
29	r_0092	0	r_0092	0	r_0726
30	r_0093	0	r_0093	0	r_0731
31	r_0094	0	r_0094	0	r_0732
32	r_0095	0	r_0095	0	r_0735
33	r_0096	0.024684	r_0096	0.049356881	r_0736
34	r_0097	0.024684	r_0097	0.049356881	r_0739
35	r_0099	0	r_0099	0	r_0770
36	r_0100	0	r_0100	0	r_0773
37	r_0101	0	r_0101	0	r_0792
38	r_0102	0	r_0102	0	r_0796
39	r_0103	0	r_0103	0	r_0831
40	r_0104	0.001818276	r_0104	0.003616249	r_0832
41	r_0105	0	r_0105	0	r_0851
42	r_0106	0	r_0106	0	r_0887
43	r_0107	0	r_0107	0	r_0889
44	r_0108	0	r_0108	0	r_0891
45	r_0109	0.007002867	r_0109	0.014029593	r_0892
46	r_0111	0	r_0111	0	r_0893
47	r_0112	0.01050543	r_0112	0.021043304	r_0904
48	r_0113	3.52E-07	r_0113	0	r_0917
49	r_0114	0	r_0114	0	r_0918
50	r_0115	0.0143176	r_0115	0.028628751	r_0958
51	r_0116	0	r_0116	0	r_0959
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2	r_0117	0	r_0117	0	r_0962
3	r_0118	0.0143176	r_0118	0.028628751	r_0973
4	r_0119	0	r_0119	0	r_0976
5	r_0120	0	r_0120	0	r_0982
6	r_0121	0	r_0121	0	r_0984
7	r_0122	0	r_0122	0	r_0990
8	r_0123	0	r_0123	0	r_1011
9	r_0124	0	r_0124	0	r_1012
10	r_0125	0	r_0125	0	r_1021
11	r_0126	0	r_0126	0	r_1048
12	r_0127	0	r_0127	7.14E-05	r_1049
13	r_0128	0	r_0128	0	r_1050
14	r_0129	0	r_0129	0	r_1054
15	r_0130	0	r_0130	0	r_1084
16	r_0131	0	r_0131	0	r_1088
17	r_0132	3.74E-05	r_0132	0	r_1110
18	r_0133	0	r_0133	0	r_1118
19	r_0134	0	r_0134	0	r_1126
20	r_0135	0	r_0135	0	r_1129
21	r_0137	0	r_0137	0	r_1171
22	r_0138	0	r_0138	0	r_1172
23	r_0139	0	r_0139	0	r_1202
24	r_0140	0	r_0140	0	r_1203
25	r_0142	0.000867941	r_0142	0.001733825	r_1220
26	r_0143	0	r_0143	0	r_1222
27	r_0144	0.000867941	r_0144	0.001733825	r_1245
28	r_0145	0	r_0145	0	r_1265
29	r_0146	0	r_0146	0	r_1277
30	r_0147	0	r_0147	0	r_1279
31	r_0148	0.256621203	r_0148	0.513162322	r_1280
32	r_0149	3.52E-07	r_0149	0	r_1595
33	r_0150	0	r_0150	0	r_1665
34	r_0151	0.01191916	r_0151	0.023832951	r_1667
35	r_0152	0.0126632	r_0152	0.025320696	r_1669
36	r_0153	0.0126632	r_0153	0.025320696	r_1672
37	r_0154	0.0025212	r_0154	0.005041264	r_1682
38	r_0155	0	r_0155	0	r_1684
39	r_0156	0	r_0156	0	r_1694
40	r_0157	0.0201872	r_0157	0.040365307	r_1696
41	r_0158	0	r_0158	0	r_1697
42	r_0159	0	r_0159	0	r_1704
43	r_0160	0	r_0160	0	r_1746
44	r_0161	0	r_0161	0	r_1754
45	r_0162	0	r_0162	0	r_1793
46	r_0163	1000	r_0163	1000	r_1795
47	r_0164	0	r_0164	0	r_1809
48	r_0165	1000	r_0165	1000	r_1811
49	r_0166	0	r_0166	0	r_1824
50	r_0167	0	r_0167	0	r_1829
51	r_0168	0	r_0168	0	r_1832
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2	r_0169	0	r_0169	0	r_1840
3	r_0170	0	r_0170	0	r_1874
4	r_0171	0	r_0171	0	r_1963
5	r_0172	0	r_0172	0	r_1964
6	r_0173	0.00798423	r_0173	0.01600204	r_1965
7	r_0174	0	r_0174	0	r_1977
8	r_0175	0	r_0175	0	r_1978
9	r_0176	0	r_0176	0	r_1979
10	r_0177	0	r_0177	0	r_1992
11	r_0178	0	r_0178	0	r_2032
12	r_0179	0	r_0179	0	r_2034
13	r_0180	0	r_0180	0	r_2045
14	r_0181	0	r_0181	0	r_2053
15	r_0182	0	r_0182	0	r_2054
16	r_0183	0	r_0183	0	r_2056
17	r_0184	0	r_0184	0	r_2057
18	r_0185	0	r_0185	0	r_2093
19	r_0186	0	r_0186	0	r_2094
20	r_0187	0	r_0187	0	r_2096
21	r_0188	0	r_0188	0	r_2097
22	r_0189	0	r_0189	0	r_2100
23	r_0190	0	r_0190	0	r_2117
24	r_0191	0	r_0191	0	r_2119
25	r_0192	0	r_0192	0	r_2125
26	r_0193	0	r_0193	0	r_2126
27	r_0194	0	r_0194	0	r_2140
28	r_0195	0.0010296	r_0195	0.002058736	r_2141
29	r_0198	0	r_0198	0	r_2182
30	r_0199	0	r_0199	0	r_2183
31	r_0200	0	r_0200	0	r_2194
32	r_0201	0	r_0201	0	r_2195
33	r_0202	0.0088132	r_0202	0.01762243	r_2196
34	r_0203	0.0088132	r_0203	0.01762243	r_2197
35	r_0204	0	r_0204	0	r_2198
36	r_0205	0	r_0205	0	r_2199
37	r_0206	0	r_0206	0	r_2200
38	r_0207	0.0070708	r_0207	0.014138415	r_2201
39	r_0208	0.0070708	r_0208	0.014138415	r_2202
40	r_0209	0.0070708	r_0209	0.014138415	r_2203
41	r_0210	0	r_0210	0	r_2204
42	r_0211	0.0044748	r_0211	0.008947584	r_2205
43	r_0212	0.0044748	r_0212	0.008947584	r_2214
44	r_0213	0	r_0213	0	r_2215
45	r_0214	0.0048664	r_0214	0.009730608	r_2217
46	r_0215	0.0191312	r_0215	0.038253783	r_2218
47	r_0216	999.8601109	r_0216	999.7202855	r_2305
48	r_0217	999.9333264	r_0217	999.8666836	r_2308
49	r_0218	0	r_0218	0	r_2309
50	r_0219	0.0191312	r_0219	0.038253783	r_2317
51	r_0220	0.01309	r_0220	0.026174104	r_2319
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2	r_0221	0	r_0221	0	r_2332
3	r_0222	0	r_0222	0	r_2334
4	r_0223	0	r_0223	0	r_2341
5	r_0224	0	r_0224	0	r_2343
6	r_0225	0.0029172	r_0225	0.005833086	r_2346
7	r_0226	11.79577992	r_0226	6.07116454	r_2360
8	r_0227	0	r_0227	0	r_2381
9	r_0228	0	r_0228	0	r_2400
10	r_0229	0	r_0229	0	r_2432
11	r_0230	0	r_0230	0	r_2433
12	r_0231	0.000301616	r_0231	0.000599849	r_2437
13	r_0233	0	r_0233	0	r_2438
14	r_0234	0.000299152	r_0234	0.000594922	r_2439
15	r_0235	0.000299152	r_0235	0.000594922	r_2446
16	r_0236	0.000299152	r_0236	0.000594922	r_2447
17	r_0237	0.000299152	r_0237	0.000594922	r_2451
18	r_0238	0.000299152	r_0238	0.000594922	r_2453
19	r_0239	0.000299152	r_0239	0.000594922	r_2454
20	r_0240	0.000299152	r_0240	0.000594922	r_2455
21	r_0241	0.000299152	r_0241	0.000594922	r_2460
22	r_0242	0	r_0242	0	r_2464
23	r_0243	4.22E-06	r_0243	8.45E-06	r_2485
24	r_0244	0.000283752	r_0244	0.000564129	r_2487
25	r_0249	0	r_0249	0	r_2488
26	r_0250	0.0119372	r_0250	0.023869023	r_2491
27	r_0252	0	r_0252	0	r_2496
28	r_0253	0	r_0253	0	r_2499
29	r_0254	0	r_0254	0	r_2504
30	r_0255	0	r_0255	0	r_2507
31	r_0256	0	r_0256	0	r_2518
32	r_0259	0	r_0259	0	r_2529
33	r_0260	0	r_0260	0	r_2621
34	r_0261	0	r_0261	0	r_2622
35	r_0262	0	r_0262	0	r_2626
36	r_0263	0	r_0263	0	r_2627
37	r_0264	0	r_0264	0	r_2630
38	r_0265	0	r_0265	0	r_2631
39	r_0266	0	r_0266	0	r_2637
40	r_0267	0	r_0267	0	r_2639
41	r_0268	0	r_0268	0	r_2641
42	r_0269	0	r_0269	0	r_2643
43	r_0270	0	r_0270	0	r_2645
44	r_0271	0	r_0271	0	r_2647
45	r_0272	4.40E-08	r_0272	8.80E-08	r_2649
46	r_0273	0.000184543	r_0273	0	r_2650
47	r_0274	0.000184543	r_0274	0	r_2662
48	r_0278	0.0103796	r_0278	0.020754525	r_2663
49	r_0279	0.0191928	r_0279	0.038376955	r_2666
50	r_0280	-999.9525196	r_0280	-999.9050606	r_2667
51	r_0281	0	r_0281	0	r_2668
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3	r_0283	0	r_0283	0	r_2670
4	r_0284	0	r_0284	0	r_2671
5	r_0285	0	r_0285	0	r_2673
6	r_0286	0	r_0286	0	r_2674
7	r_0287	0	r_0287	0	r_2677
8	r_0288	0	r_0288	0	r_2678
9	r_0289	0	r_0289	0	r_2680
10	r_0290	0	r_0290	0	r_2681
11	r_0291	0	r_0291	0	r_2682
12	r_0292	0	r_0292	0	r_2683
13	r_0293	0	r_0293	0	r_2684
14	r_0294	0	r_0294	0	r_2685
15	r_0295	0	r_0295	0	r_2686
16	r_0296	0	r_0296	0	r_2687
17	r_0297	0	r_0297	0	r_2692
18	r_0298	0	r_0298	0	r_2693
19	r_0299	0	r_0299	0	r_2694
20	r_0300	0.0448272	r_0300	0.089634912	r_2695
21	r_0301	0	r_0301	0	r_2697
22	r_0302	-999.9525196	r_0302	-999.9050606	r_2699
23	r_0303	999.9973468	r_0303	999.9946955	r_2700
24	r_0304	4.40E-08	r_0304	8.80E-08	r_2701
25	r_0306	0	r_0306	0	r_2705
26	r_0307	0.0022308	r_0307	0.004426196	r_2706
27	r_0308	0	r_0308	0	r_2708
28	r_0309	0.0002904	r_0309	0.000580669	r_2710
29	r_0310	0.0002904	r_0310	0.000580669	r_2718
30	r_0311	0	r_0311	0	r_2719
31	r_0312	0	r_0312	0	r_2722
32	r_0313	0.0002904	r_0313	0.000580669	r_2723
33	r_0314	0	r_0314	0	r_2726
34	r_0315	0	r_0315	0	r_2727
35	r_0317	0.000301616	r_0317	0.000599849	r_2730
36	r_0318	0	r_0318	0	r_2731
37	r_0319	0	r_0319	0	r_2732
38	r_0320	0	r_0320	0	r_2734
39	r_0321	0	r_0321	0	r_2736
40	r_0322	0	r_0322	0	r_2737
41	r_0323	0	r_0323	0	r_2738
42	r_0326	1.58E-04	r_0326	0.00028233	r_2739
43	r_0327	0	r_0327	0	r_2740
44	r_0328	0	r_0328	0	r_2741
45	r_0329	0	r_0329	0	r_2742
46	r_0330	-1.06E-04	r_0330	-0.000211152	r_2745
47	r_0331	0	r_0331	0	r_2746
48	r_0332	0	r_0332	0	r_2750
49	r_0334	0	r_0334	0	r_2751
50	r_0335	0	r_0335	0	r_2752
51	r_0340	1.90E-05	r_0340	3.79E-05	r_2753
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5	r_0344	0.0001584	r_0344	0.000316729	r_2761
6	r_0345	0	r_0345	0	r_2762
7	r_0346	0	r_0346	0	r_2763
8	r_0347	0	r_0347	0	r_2765
9	r_0348	0	r_0348	0	r_2766
10	r_0349	-0.0048664	r_0349	-0.009730608	r_2773
11	r_0350	0	r_0350	0	r_2775
12	r_0351	0	r_0351	0	r_2776
13	r_0352	0.024684	r_0352	0.049356881	r_2777
14	r_0353	0.0084788	r_0353	0.016953781	r_2778
15	r_0354	0	r_0354	0	r_2779
16	r_0355	0.000606092	r_0355	0.001205416	r_2781
17	r_0356	0	r_0356	0	r_2783
18	r_0357	0	r_0357	0	r_2785
19	r_0358	0	r_0358	0	r_2786
20	r_0359	0	r_0359	0	r_2789
21	r_0360	0	r_0360	0	r_2790
22	r_0361	0.0355476	r_0361	0.071079188	r_2791
23	r_0362	0.0355476	r_0362	0.071079188	r_2798
24	r_0363	0	r_0363	0	r_2799
25	r_0364	0	r_0364	3.44E-05	r_2800
26	r_0365	0	r_0365	0	r_2803
27	r_0366	0.27519981	r_0366	0.54052448	r_2805
28	r_0368	0	r_0368	0	r_2806
29	r_0369	0	r_0369	0	r_2808
30	r_0370	0	r_0370	0	r_2811
31	r_0373	0	r_0373	0	r_2884
32	r_0399	0	r_0399	0	r_2885
33	r_0400	0	r_0400	0	r_2886
34	r_0402	0	r_0402	0	r_2887
35	r_0410	0	r_0410	0	r_2888
36	r_0412	0	r_0412	0	r_2889
37	r_0436	4.40E-08	r_0436	8.80E-08	r_2891
38	r_0437	0	r_0437	0	r_2892
39	r_0438	3.935876812	r_0438	1.909945527	r_2896
40	r_0439	7.871753625	r_0439	3.819891055	r_2897
41	r_0440	0	r_0440	0	r_2898
42	r_0441	0	r_0441	0	r_2901
43	r_0442	0	r_0442	0	r_2902
44	r_0443	0	r_0443	0	r_2905
45	r_0445	0	r_0445	1.142322419	r_2910
46	r_0446	0.005315549	r_0446	-1.126337476	r_2913
47	r_0447	0	r_0447	0	r_2914
48	r_0448	0	r_0448	0	r_2915
49	r_0449	0	r_0449	0	r_2916
50	r_0450	0	r_0450	0	r_2917
51	r_0451	-3.52E-07	r_0451	0	r_2919
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2	r_0452	0.02678676	r_0452	0.063292062	r_2920
3	r_0453	0.0048664	r_0453	0.009730608	r_2921
4	r_0454	0	r_0454	0	r_2922
5	r_0455	0	r_0455	0	r_2923
6	r_0457	0	r_0457	0	r_2925
7	r_0458	0	r_0458	0	r_2926
8	r_0459	1000	r_0459	1000	r_2930
9	r_0460	0	r_0460	0	r_2931
10	r_0461	0	r_0461	0	r_2932
11	r_0462	0.000606092	r_0462	0.001205416	r_2933
12	r_0463	0	r_0463	0	r_2934
13	r_0464	0	r_0464	0	r_2935
14	r_0465	0	r_0465	0	r_2936
15	r_0466	3.852593286	r_0466	0.029945102	r_2939
16	r_0467	-2.977470433	r_0467	0.720356853	r_2941
17	r_0468	0	r_0468	0	r_2942
18	r_0469	0	r_0469	0	r_2946
19	r_0470	0	r_0470	0	r_2948
20	r_0471	0.239030085	r_0471	1.046435285	r_2949
21	r_0472	0	r_0472	0	r_2950
22	r_0473	0	r_0473	0	r_2951
23	r_0475	0	r_0475	0	r_2952
24	r_0476	0.066355124	r_0476	0.132680359	r_2953
25	r_0477	4.40E-08	r_0477	8.80E-08	r_2954
26	r_0478	0.0046376	r_0478	0.009273111	r_2955
27	r_0479	0.0132792	r_0479	0.026552418	r_2956
28	r_0480	0	r_0480	0	r_2957
29	r_0481	0	r_0481	0	r_2960
30	r_0482	0	r_0482	0	r_2961
31	r_0483	0	r_0483	0	r_2962
32	r_0484	0	r_0484	0	r_2963
33	r_0485	0	r_0485	0	r_2964
34	r_0486	0.317440335	r_0486	1.193469287	r_2967
35	r_0487	0	r_0487	0	r_2970
36	r_0488	0	r_0488	0	r_2972
37	r_0489	0	r_0489	0	r_2977
38	r_0490	0	r_0490	0	r_2979
39	r_0491	0	r_0491	0.000843257	r_2980
40	r_0492	0.0004194	r_0492	0	r_2981
41	r_0497	0	r_0497	0	r_2982
42	r_0499	0.01191916	r_0499	0.023832951	r_2983
43	r_0500	0	r_0500	0	r_2985
44	r_0501	0	r_0501	0	r_2989
45	r_0502	0.024697112	r_0502	1.186347613	r_2990
46	r_0503	0	r_0503	-0.568482257	r_2991
47	r_0504	0	r_0504	0	r_2993
48	r_0505	0	r_0505	7.04E-07	r_2994
49	r_0506	0	r_0506	0.568482257	r_2995
50	r_0507	0	r_0507	0.568482257	r_2996
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3	r_0510	0.022814	r_0510	0.045617724	r_3004
4	r_0511	0	r_0511	0	r_3006
5	r_0512	0.0127776	r_0512	0.025549444	r_3011
6	r_0514	0.00217316	r_0514	0.004345341	r_3111
7	r_0518	0	r_0518	0	r_3348
8	r_0519	0	r_0519	0	r_3354
9	r_0520	0	r_0520	0	r_3428
10	r_0521	0	r_0521	0	r_3434
11	r_0522	0	r_0522	0	r_3510
12	r_0523	0	r_0523	0	r_3511
13	r_0524	0	r_0524	0	r_3512
14	r_0525	4.36E-05	r_0525	8.71E-05	r_3513
15	r_0526	0	r_0526	0	r_3515
16	r_0527	0	r_0527	0	r_3516
17	r_0528	0	r_0528	0.000298253	r_3517
18	r_0529	0.00014916	r_0529	0	r_3518
19	r_0530	4.40E-08	r_0530	8.80E-08	r_3519
20	r_0531	4.40E-08	r_0531	8.80E-08	r_3520
21	r_0532	0	r_0532	0	r_3523
22	r_0533	0	r_0533	0	r_3524
23	r_0534	1	r_0534	1	r_3525
24	r_0535	0	r_0535	0	r_3526
25	r_0536	0.0029172	r_0536	0.005833086	r_3531
26	r_0537	0.0029172	r_0537	0.005833086	r_3532
27	r_0538	0.0029172	r_0538	0.005833086	r_3533
28	r_0539	0.0029172	r_0539	0.005833086	r_3534
29	r_0540	0	r_0540	0	r_3536
30	r_0541	0	r_0541	0	r_3537
31	r_0542	0.0125928	r_0542	0.025179928	r_3538
32	r_0543	0	r_0543	0	r_3539
33	r_0544	0	r_0544	0	r_3540
34	r_0545	0.0125928	r_0545	0.025179928	r_3542
35	r_0546	0.0191312	r_0546	0.038253783	r_3543
36	r_0547	0	r_0547	0	r_3544
37	r_0548	0.01661	r_0548	0.033212518	r_3547
38	r_0549	0.0025212	r_0549	0.005041264	r_3548
39	r_0550	0	r_0550	0	r_3552
40	r_0551	0	r_0551	0	r_3554
41	r_0552	0	r_0552	0	r_3562
42	r_0553	0	r_0553	0	r_3563
43	r_0554	0	r_0554	0	r_3571
44	r_0555	0	r_0555	0	r_3572
45	r_0556	0	r_0556	0	r_3573
46	r_0557	4.40E-08	r_0557	8.80E-08	r_3574
47	r_0558	0.001818276	r_0558	0.003616249	r_3575
48	r_0559	0	r_0559	0	r_3576
49	r_0560	0.001818276	r_0560	0.003616249	r_3577
50	r_0561	0	r_0561	0	r_3578
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3	r_0564	0.0029172	r_0564	0.005833086	r_3581
4	r_0565	0.00217316	r_0565	0.004345341	r_3585
5	r_0566	0.0088132	r_0566	0.01762243	r_3586
6	r_0567	0	r_0567	0	r_3587
7	r_0568	0.415665738	r_0568	0	r_3588
8	r_0569	0	r_0569	0.830825489	r_3599
9	r_0570	0.01483636	r_0570	0.029666037	r_3600
10	r_0571	0	r_0571	0	r_3603
11	r_0572	0	r_0572	0	r_3604
12	r_0573	0	r_0573	0	r_3650
13	r_0574	0	r_0574	0	r_3653
14	r_0575	0	r_0575	0	r_3662
15	r_0596	0	r_0596	0	r_3663
16	r_0597	0	r_0597	0	r_3669
17	r_0598	0	r_0598	0	r_3681
18	r_0599	0	r_0599	0	r_3682
19	r_0600	0	r_0600	0	r_3683
20	r_0601	0	r_0601	0	r_3684
21	r_0602	0	r_0602	0	r_3685
22	r_0603	0	r_0603	0	r_3756
23	r_0604	0	r_0604	0	r_3758
24	r_0605	0	r_0605	0	r_3765
25	r_0606	0	r_0606	0	r_3773
26	r_0607	0	r_0607	0	r_3781
27	r_0608	0	r_0608	0	r_3783
28	r_0609	0	r_0609	0	r_3784
29	r_0610	0	r_0610	0	r_3785
30	r_0611	0	r_0611	0	r_3787
31	r_0612	0	r_0612	0	r_3788
32	r_0613	0	r_0613	0	r_3789
33	r_0614	0	r_0614	0	r_3795
34	r_0615	0	r_0615	0	r_3797
35	r_0616	0	r_0616	0	r_3805
36	r_0617	0	r_0617	0	r_3811
37	r_0618	0	r_0618	0	r_3850
38	r_0619	0	r_0619	0	r_3852
39	r_0620	0	r_0620	0	r_3858
40	r_0621	0	r_0621	0	r_3860
41	r_0622	0	r_0622	0	r_3884
42	r_0623	0	r_0623	0	r_3910
43	r_0624	0	r_0624	0	r_3939
44	r_0625	0	r_0625	0	r_3957
45	r_0626	0	r_0626	0	r_3963
46	r_0627	0	r_0627	0	r_3964
47	r_0628	0	r_0628	0	r_3971
48	r_0629	0	r_0629	0	r_3972
49	r_0630	0	r_0630	0	r_3975
50	r_0631	0	r_0631	0	r_3976
51	r_0632	0	r_0632	0	r_3979
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4	r_0635	0	r_0635	0	r_3989
5	r_0636	0	r_0636	0	r_3991
6	r_0637	0	r_0637	0	r_3997
7	r_0638	0	r_0638	0	r_3998
8	r_0639	0	r_0639	0	r_4006
9	r_0640	0	r_0640	0	r_4032
10	r_0641	0	r_0641	0	r_4039
11	r_0642	0	r_0642	0	
12	r_0643	0	r_0643	0	
13	r_0644	0	r_0644	0	
14	r_0645	0	r_0645	0	
15	r_0646	0	r_0646	0	
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18	r_0649	0	r_0649	0	
19	r_0650	0	r_0650	0	
20	r_0651	0	r_0651	0	
21	r_0652	0	r_0652	0	
22	r_0653	0	r_0653	0	
23	r_0654	0	r_0654	0	
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26	r_0657	0	r_0657	0	
27	r_0658	0	r_0658	0	
28	r_0659	-0.0026532	r_0659	-0.005304501	
29	r_0661	0	r_0661	0	
30	r_0662	0	r_0662	0	
31	r_0663	-0.0084788	r_0663	-0.016953781	
32	r_0664	0	r_0664	0	
33	r_0665	0.0084788	r_0665	0.016953781	
34	r_0666	0	r_0666	0	
35	r_0667	0.000606092	r_0667	0.001205416	
36	r_0668	0	r_0668	0	
37	r_0669	0.0084788	r_0669	0.016953781	
38	r_0670	0	r_0670	0	
39	r_0671	0.0075636	r_0671	0.015123793	
40	r_0672	0	r_0672	0	
41	r_0673	0	r_0673	0	
42	r_0674	-0.0171116	r_0674	0	
43	r_0675	0	r_0675	0	
44	r_0676	0	r_0676	0	
45	r_0678	0.0125928	r_0678	0.025179928	
46	r_0679	0	r_0679	0	
47	r_0680	0	r_0680	0	
48	r_0681	0	r_0681	0	
49	r_0682	0	r_0682	0	
50	r_0683	0	r_0683	0	
51	r_0687	0	r_0687	0	
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2	r_0688	0	r_0688	0	
3	r_0689	0	r_0689	0	
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5	r_0691	0	r_0691	0	
6	r_0692	0	r_0692	0	
7	r_0693	0.0081884	r_0693	0.016373112	
8	r_0694	0.0075636	r_0694	0.015123793	
9	r_0695	0	r_0695	0	
10	r_0696	0	r_0696	0	
11	r_0697	0	r_0697	0	
12	r_0698	0.000303024	r_0698	0.000602664	
13	r_0699	999.96308	r_0699	999.960392	
14	r_0700	-999.9761216	r_0700	-999.9864694	
15	r_0701	0.0130416	r_0701	0.026077326	
16	r_0702	0	r_0702	0	
17	r_0703	0	r_0703	0	
18	r_0704	0	r_0704	0	
19	r_0705	0	r_0705	0	
20	r_0706	0	r_0706	0	
21	r_0707	0	r_0707	0	
22	r_0708	0	r_0708	0	
23	r_0711	0.0125928	r_0711	0.025179928	
24	r_0712	0	r_0712	0	
25	r_0713	999.9781536	r_0713	999.9563185	
26	r_0714	-999.9513672	r_0714	-999.8930265	
27	r_0715	0	r_0715	0	
28	r_0716	0	r_0716	0	
29	r_0717	0	r_0717	0	
30	r_0718	0	r_0718	0	
31	r_0719	0	r_0719	0	
32	r_0721	0	r_0721	0	
33	r_0722	0.03556656	r_0722	0.071117099	
34	r_0723	-0.03556656	r_0723	-0.071117099	
35	r_0724	0	r_0724	0	
36	r_0725	0.021439971	r_0725	1.179836464	
37	r_0726	0.000867941	r_0726	0.001733825	
38	r_0727	0.003098741	r_0727	0.006194421	
39	r_0728	0	r_0728	0	
40	r_0729	0.0022308	r_0729	0.004460595	
41	r_0730	0	r_0730	0	
42	r_0731	7.390894014	r_0731	0	
43	r_0732	-7.369454043	r_0732	1.179836464	
44	r_0733	0	r_0733	0	
45	r_0734	0	r_0734	0	
46	r_0735	0.000214739	r_0735	0	
47	r_0736	0.001603537	r_0736	0.003616249	
48	r_0737	0	r_0737	0	
49	r_0738	0	r_0738	0	
50	r_0739	0.001818276	r_0739	0.003616249	
51	r_0747	1.90E-05	r_0747	3.79E-05	
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3	r_0749	0	r_0749	0
4	r_0750	0	r_0750	0
5	r_0751	0	r_0751	0
6	r_0752	0	r_0752	0
7	r_0753	0	r_0753	0
8	r_0754	0	r_0754	0
9	r_0755	0	r_0755	0
10	r_0756	0	r_0756	0
11	r_0757	0.000141548	r_0757	0.000283032
12	r_0758	0.000141548	r_0758	0.000283032
13	r_0759	0.0143176	r_0759	0.028628751
14	r_0760	4.40E-08	r_0760	8.80E-08
15	r_0761	0	r_0761	0
16	r_0762	0.0075636	r_0762	0.015123793
17	r_0763	0	r_0763	0
18	r_0764	0	r_0764	0
19	r_0765	0	r_0765	0
20	r_0766	0	r_0766	0
21	r_0767	0	r_0767	0
22	r_0768	0.0075636	r_0768	0.015123793
23	r_0769	0	r_0769	0
24	r_0770	7.805510545	r_0770	3.108438189
25	r_0771	0.0075636	r_0771	0.015123793
26	r_0772	0	r_0772	0
27	r_0773	0.066243432	r_0773	0.701722258
28	r_0774	0	r_0774	0
29	r_0775	0	r_0775	0
30	r_0781	0	r_0781	0
31	r_0782	0	r_0782	0
32	r_0783	0	r_0783	0
33	r_0784	0	r_0784	0
34	r_0785	0.0075636	r_0785	0.015123793
35	r_0786	0.0075636	r_0786	0.015123793
36	r_0787	0	r_0787	0
37	r_0788	0	r_0788	0
38	r_0789	0	r_0789	0
39	r_0790	0	r_0790	0
40	r_0791	0	r_0791	0
41	r_0792	0.001377456	r_0792	0.003122767
42	r_0793	0	r_0793	0
43	r_0795	0	r_0795	0
44	r_0796	0.00014916	r_0796	0
45	r_0797	0	r_0797	0
46	r_0798	0	r_0798	0
47	r_0799	0	r_0799	0
48	r_0800	0.04827332	r_0800	0.096524895
49	r_0801	0	r_0801	0
50	r_0802	0	r_0802	0
51	r_0803	0	r_0803	0
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5	r_0807	0	r_0807	0
6	r_0810	0	r_0810	0
7	r_0811	0.125936844	r_0811	0.251816961
8	r_0812	0	r_0812	0
9	r_0813	0.0025212	r_0813	0.005041264
10	r_0815	0	r_0815	0
11	r_0816	0.0070708	r_0816	0.014138415
12	r_0817	0	r_0817	0
13	r_0818	0.0143176	r_0818	0.028628751
14	r_0819	0.0072468	r_0819	0.014490336
15	r_0820	-0.0048664	r_0820	-0.009730608
16	r_0821	0.0048664	r_0821	0.009730608
17	r_0831	0	r_0831	7.04E-07
18	r_0832	0	r_0832	7.04E-07
19	r_0841	0	r_0841	0
20	r_0842	0	r_0842	0
21	r_0843	0	r_0843	0
22	r_0844	0	r_0844	0
23	r_0845	0	r_0845	0
24	r_0847	0	r_0847	0
25	r_0848	0	r_0848	0
26	r_0849	0	r_0849	0
27	r_0850	0	r_0850	0
28	r_0851	999.9941084	r_0851	999.954004
29	r_0852	0.0058916	r_0852	0.011780546
30	r_0853	0	r_0853	0
31	r_0854	0	r_0854	0
32	r_0855	0.01191916	r_0855	0.023832951
33	r_0882	4.40E-08	r_0882	8.80E-08
34	r_0883	0.0025212	r_0883	0.005041264
35	r_0884	0	r_0884	0
36	r_0885	0	r_0885	0
37	r_0886	0	r_0886	0
38	r_0887	0	r_0887	0.60819937
39	r_0888	0.123706	r_0888	0.247356278
40	r_0889	3.852593286	r_0889	0.029945102
41	r_0890	0	r_0890	0
42	r_0891	0.042240525	r_0891	0.652944807
43	r_0892	0.317440335	r_0892	1.193469287
44	r_0893	0.27519981	r_0893	0.54052448
45	r_0902	-0.03556656	r_0902	-0.071117099
46	r_0903	0	r_0903	0
47	r_0904	0.001818276	r_0904	0.003616249
48	r_0905	0	r_0905	0
49	r_0906	0	r_0906	0
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51	r_0908	0.01191916	r_0908	0.023832951
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2	r_0909	0.0029172	r_0909	0.005833086
3	r_0910	0.0029172	r_0910	0.005833086
4	r_0911	0.01191916	r_0911	0.023832951
5	r_0912	0.01483636	r_0912	0.029666037
6	r_0913	0.0088132	r_0913	0.01762243
7	r_0914	0.01191916	r_0914	0.023832951
8	r_0915	0.01191916	r_0915	0.023832951
9	r_0916	0.03607956	r_0916	0.072142868
10	r_0917	0.042240525	r_0917	0.652944807
11	r_0918	0.042240525	r_0918	0.652944807
12	r_0919	0	r_0919	0
13	r_0920	0	r_0920	0
14	r_0921	0	r_0921	0
15	r_0922	0	r_0922	0
16	r_0929	0	r_0929	0
17	r_0935	1.76E-07	r_0935	3.52E-07
18	r_0936	0	r_0936	0
19	r_0937	0	r_0937	0
20	r_0938	0.0058916	r_0938	0.011780546
21	r_0939	0.004488	r_0939	0.008973978
22	r_0940	0	r_0940	0
23	r_0941	0.0072468	r_0941	0.014490336
24	r_0942	2.20E-08	r_0942	4.40E-08
25	r_0943	0	r_0943	0
26	r_0949	0	r_0949	0
27	r_0950	0	r_0950	0
28	r_0951	0	r_0951	0
29	r_0953	0	r_0953	0
30	r_0954	0	r_0954	0
31	r_0955	0	r_0955	0
32	r_0956	0	r_0956	0
33	r_0957	0.0072468	r_0957	0.014490336
34	r_0958	0.091256352	r_0958	0.17274099
35	r_0959	0.00798423	r_0959	0.01600204
36	r_0960	0	r_0960	0
37	r_0961	0.075916428	r_0961	0.151740913
38	r_0962	0.23681421	r_0962	0.46377057
39	r_0963	0	r_0963	0
40	r_0965	0	r_0965	0
41	r_0966	0	r_0966	0
42	r_0967	8.71E-05	r_0967	0.000174201
43	r_0968	4.36E-05	r_0968	8.71E-05
44	r_0969	0	r_0969	0
45	r_0970	0	r_0970	0
46	r_0971	0	r_0971	0
47	r_0972	0	r_0972	0
48	r_0973	0	r_0973	3.44E-05
49	r_0974	0.0001584	r_0974	0.000316729
50	r_0975	0	r_0975	0
51	r_0976	0.000264	r_0976	0.000493482
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3	r_0978	1.06E-04	r_0978	0.000211152
4	r_0979	0	r_0979	0
5	r_0982	1.314619362	r_0982	0.070811197
6	r_0983	0	r_0983	0
7	r_0984	2.537886804	r_0984	-0.041040297
8	r_0985	0	r_0985	0
9	r_0986	9.24E-06	r_0986	1.85E-05
10	r_0987	0	r_0987	0
11	r_0988	0.0125928	r_0988	0.025179928
12	r_0989	0.0125928	r_0989	0.025179928
13	r_0990	-0.475150233	r_0990	0.60819937
14	r_0992	0	r_0992	0
15	r_0993	1.90E-05	r_0993	3.79E-05
16	r_0995	0.0081576	r_0995	0.016311525
17	r_0996	0.0191928	r_0996	0.038376955
18	r_0997	0.0191928	r_0997	0.038376955
19	r_0998	0	r_0998	0
20	r_0999	0	r_0999	0
21	r_1000	0	r_1000	0
22	r_1001	0	r_1001	0
23	r_1002	0	r_1002	0
24	r_1003	0	r_1003	0
25	r_1004	0	r_1004	0
26	r_1005	0	r_1005	0
27	r_1006	0	r_1006	0
28	r_1007	0	r_1007	0
29	r_1008	0	r_1008	0
30	r_1009	0	r_1009	0
31	r_1010	0	r_1010	0
32	r_1011	0.000303024	r_1011	0.000602664
33	r_1012	0.000303024	r_1012	0.000602664
34	r_1021	-3.52E-07	r_1021	0.009730608
35	r_1022	0	r_1022	0
36	r_1023	0	r_1023	0
37	r_1024	0	r_1024	0
38	r_1025	0	r_1025	0
39	r_1026	0.0025212	r_1026	0.005041264
40	r_1027	0.0025212	r_1027	0.005041264
41	r_1029	0	r_1029	0
42	r_1030	0	r_1030	0
43	r_1031	0	r_1031	0
44	r_1032	0	r_1032	0
45	r_1033	0	r_1033	0
46	r_1034	0	r_1034	0
47	r_1035	0	r_1035	0
48	r_1036	0	r_1036	0
49	r_1037	0	r_1037	0
50	r_1038	0.0030492	r_1038	0.006097027
51	r_1039	0	r_1039	0
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2	r_1040	0	r_1040	0
3	r_1041	0.01661	r_1041	0.033212518
4	r_1042	0.0084216	r_1042	0.016839407
5	r_1043	0	r_1043	0
6	r_1045	0.0001584	r_1045	0.000316729
7	r_1046	0	r_1046	0
8	r_1047	0	r_1047	0
9	r_1048	1.753690035	r_1048	-0.609531041
10	r_1049	1.278539802	r_1049	-0.001331671
11	r_1050	1.259347002	r_1050	-0.039708626
12	r_1051	0.0010296	r_1051	0.002058736
13	r_1054	-0.475569634	r_1054	0.607356112
14	r_1055	0.0088132	r_1055	0.01762243
15	r_1056	0	r_1056	0
16	r_1057	0.0012496	r_1057	0.002498637
17	r_1058	0	r_1058	0
18	r_1063	1000	r_1063	1000
19	r_1065	0	r_1065	0
20	r_1066	0.004488	r_1066	0.008973978
21	r_1067	0	r_1067	0
22	r_1068	0	r_1068	0
23	r_1069	4.40E-08	r_1069	8.80E-08
24	r_1070	0	r_1070	0
25	r_1071	-1000	r_1071	-1000
26	r_1072	0.0022308	r_1072	0.004460595
27	r_1073	0	r_1073	0
28	r_1074	0	r_1074	0
29	r_1075	0	r_1075	0
30	r_1076	0	r_1076	0
31	r_1077	0	r_1077	0
32	r_1078	0	r_1078	0
33	r_1079	0	r_1079	0
34	r_1080	0	r_1080	0
35	r_1081	4.40E-08	r_1081	8.80E-08
36	r_1082	0	r_1082	0
37	r_1083	4.40E-08	r_1083	8.80E-08
38	r_1084	-999.876294	r_1084	-999.7526437
39	r_1087	-1000	r_1087	-1000
40	r_1088	999.9883576	r_1088	999.9767204
41	r_1089	0.0116424	r_1089	0.023279556
42	r_1090	0	r_1090	0
43	r_1091	0	r_1091	0
44	r_1092	0	r_1092	0
45	r_1093	0	r_1093	0
46	r_1094	0	r_1094	0
47	r_1095	0	r_1095	0
48	r_1619	0	r_1619	0
49	r_1838	0.0125928	r_1838	0.025179928
50	r_2029	0	r_2029	0
51	r_2112	0	r_2112	0
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2	r_2113	0	r_2113	0
3	r_2114	0.0075636	r_2114	0.015123793
4	r_2115	0	r_2115	0
5	r_2116	0	r_2116	0
6	r_2117	-1000	r_2117	-999.9657845
7	r_2118	0	r_2118	0
8	r_2119	-999.995512	r_2119	-999.991026
9	r_2126	0.475150233	r_2126	0
10	r_2131	0.0474804	r_2131	0.094939413
11	r_2140	0.000904568	r_2140	0.001863008
12	r_2141	7.68E-05	r_2141	0.000109351
13	r_2142	0	r_2142	0
14	r_2143	0	r_2143	0
15	r_2144	0	r_2144	0
16	r_2145	0	r_2145	0
17	r_2146	0	r_2146	0
18	r_2147	0	r_2147	0
19	r_2148	0	r_2148	0
20	r_2149	0	r_2149	0
21	r_2150	0	r_2150	0
22	r_2151	0	r_2151	0
23	r_2152	0	r_2152	0
24	r_2153	0	r_2153	0
25	r_2154	0	r_2154	0
26	r_2155	0	r_2155	0
27	r_2156	0	r_2156	0
28	r_2157	1.90E-05	r_2157	3.79E-05
29	r_2158	1.90E-05	r_2158	3.79E-05
30	r_2159	1.90E-05	r_2159	3.79E-05
31	r_2160	0	r_2160	0
32	r_2161	0	r_2161	0
33	r_2162	0	r_2162	0
34	r_2163	0	r_2163	0
35	r_2164	1.90E-05	r_2164	3.79E-05
36	r_2165	1.90E-05	r_2165	3.79E-05
37	r_2166	1.90E-05	r_2166	3.79E-05
38	r_2167	0	r_2167	0
39	r_2168	0	r_2168	0
40	r_2169	0	r_2169	0
41	r_2170	0	r_2170	0
42	r_2171	1.90E-05	r_2171	3.79E-05
43	r_2172	1.90E-05	r_2172	3.79E-05
44	r_2173	1.90E-05	r_2173	3.79E-05
45	r_2174	0	r_2174	0
46	r_2175	0	r_2175	0
47	r_2176	0	r_2176	0
48	r_2177	0	r_2177	0
49	r_2178	1.90E-05	r_2178	3.79E-05
50	r_2179	1.90E-05	r_2179	3.79E-05
51	r_2180	1.90E-05	r_2180	3.79E-05
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2	r_2181	0	r_2181	0
3	r_2182	0.000885608	r_2182	0.000843257
4	r_2183	5.78E-05	r_2183	7.14E-05
5	r_2194	-1000	r_2194	1000
6	r_2195	5.69E-05	r_2195	-1000
7	r_2196	-999.9991144	r_2196	999.9998614
8	r_2197	999.999938	r_2197	-1000
9	r_2198	1000	r_2198	-999.9998906
10	r_2199	-1000	r_2199	0.001938829
11	r_2200	1000	r_2200	-1000
12	r_2201	-5.69E-05	r_2201	1000
13	r_2202	999.9991144	r_2202	-999.9998909
14	r_2203	-999.9999528	r_2203	1000
15	r_2204	-1000	r_2204	999.9998906
16	r_2205	1000	r_2205	-0.001938829
17	r_2206	0	r_2206	0
18	r_2207	0	r_2207	0
19	r_2208	0	r_2208	0
20	r_2209	0	r_2209	0
21	r_2210	0	r_2210	0
22	r_2211	0	r_2211	0
23	r_2212	0	r_2212	0
24	r_2213	0	r_2213	0
25	r_2214	-1.00E+03	r_2214	999.9999621
26	r_2215	1000	r_2215	-1000
27	r_2216	0	r_2216	0
28	r_2217	999.999981	r_2217	-1000
29	r_2218	-1000	r_2218	1000
30	r_2232	0	r_2232	0
31	r_2233	0	r_2233	0
32	r_2234	0	r_2234	0
33	r_2235	0	r_2235	0
34	r_2236	0	r_2236	0
35	r_2237	0	r_2237	0
36	r_2238	0	r_2238	0
37	r_2239	0	r_2239	0
38	r_2240	0	r_2240	0
39	r_2241	0	r_2241	0
40	r_2242	0	r_2242	0
41	r_2243	0	r_2243	0
42	r_2244	0	r_2244	0
43	r_2245	0	r_2245	0
44	r_2246	0	r_2246	0
45	r_2247	0	r_2247	0
46	r_2248	0	r_2248	0
47	r_2249	0	r_2249	0
48	r_2250	0	r_2250	0
49	r_2251	0	r_2251	0
50	r_2252	0	r_2252	0
51	r_2253	0	r_2253	0
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2	r_2254	0	r_2254	0
3	r_2255	0	r_2255	0
4	r_2256	0	r_2256	0
5	r_2257	0	r_2257	0
6	r_2258	0	r_2258	0
7	r_2259	0	r_2259	0
8	r_2260	0	r_2260	0
9	r_2261	0	r_2261	0
10	r_2262	0	r_2262	0
11	r_2263	0	r_2263	0
12	r_2264	0	r_2264	0
13	r_2265	0	r_2265	0
14	r_2266	0	r_2266	0
15	r_2267	0	r_2267	0
16	r_2268	0	r_2268	0
17	r_2269	0	r_2269	0
18	r_2270	0	r_2270	0
19	r_2271	0	r_2271	0
20	r_2272	0	r_2272	0
21	r_2273	0	r_2273	0
22	r_2274	0	r_2274	0
23	r_2275	0	r_2275	0
24	r_2276	0	r_2276	0
25	r_2277	0	r_2277	0
26	r_2278	0	r_2278	0
27	r_2279	0	r_2279	0
28	r_2280	0	r_2280	0
29	r_2281	0	r_2281	0
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35	r_2287	0	r_2287	0
36	r_2288	0	r_2288	0
37	r_2289	0	r_2289	0
38	r_2290	0	r_2290	0
39	r_2291	0	r_2291	0
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46	r_2298	0	r_2298	0
47	r_2299	0	r_2299	0
48	r_2300	0	r_2300	0
49	r_2301	0	r_2301	0
50	r_2302	0	r_2302	0
51	r_2303	0	r_2303	0
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3	r_2305	999.9973468	r_2305	999.9946955
4	r_2308	0	r_2308	0.000843257
5	r_2309	0.000366882	r_2309	0
6	r_2310	0	r_2310	0
7	r_2311	0	r_2311	0
8	r_2312	0	r_2312	0
9	r_2313	0	r_2313	0
10	r_2314	0	r_2314	0
11	r_2315	0	r_2315	0
12	r_2316	0.00E+00	r_2316	0
13	r_2317	4.72E-05	r_2317	0
14	r_2318	0	r_2318	0
15	r_2319	5.27E-06	r_2319	0
16	r_2320	0	r_2320	0
17	r_2321	0	r_2321	0
18	r_2322	0	r_2322	0
19	r_2323	0	r_2323	0
20	r_2324	0	r_2324	0
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22	r_2326	0	r_2326	0
23	r_2327	0	r_2327	0
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26	r_2330	0	r_2330	0
27	r_2331	0	r_2331	0
28	r_2332	0	r_2332	0.000843257
29	r_2333	0	r_2333	0
30	r_2334	0.000366882	r_2334	0
31	r_2335	0	r_2335	0
32	r_2336	0	r_2336	0
33	r_2337	0	r_2337	0
34	r_2338	0	r_2338	0
35	r_2339	0	r_2339	0
36	r_2340	0.00E+00	r_2340	0
37	r_2341	4.72E-05	r_2341	0
38	r_2342	0	r_2342	0
39	r_2343	5.27E-06	r_2343	0
40	r_2344	0	r_2344	0
41	r_2345	0	r_2345	0
42	r_2346	0.000237062	r_2346	0
43	r_2347	0	r_2347	0
44	r_2348	0.00E+00	r_2348	0
45	r_2349	0	r_2349	0
46	r_2350	0	r_2350	0
47	r_2351	0	r_2351	0
48	r_2352	0	r_2352	0
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6	r_2360	0	r_2360	3.33E-05
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44	r_2398	0	r_2398	0
45	r_2399	0	r_2399	0
46	r_2400	0	r_2400	0.000109132
47	r_2401	0	r_2401	0
48	r_2402	0	r_2402	0
49	r_2403	0	r_2403	0
50	r_2404	0	r_2404	0
51	r_2405	0	r_2405	0
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5	r_2409	0	r_2409	0
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18	r_2422	0	r_2422	0
19	r_2423	0	r_2423	0
20	r_2424	0	r_2424	0
21	r_2425	0.00E+00	r_2425	0
22	r_2426	0	r_2426	0
23	r_2427	0	r_2427	0
24	r_2428	0	r_2428	0
25	r_2429	0	r_2429	0
26	r_2430	0	r_2430	0
27	r_2431	0	r_2431	0
28	r_2432	0	r_2432	0.000809947
29	r_2433	0.00012982	r_2433	0
30	r_2434	0.00E+00	r_2434	0
31	r_2435	0	r_2435	0
32	r_2436	0	r_2436	0
33	r_2437	4.72E-05	r_2437	0
34	r_2438	3.79E-05	r_2438	0
35	r_2439	0.000189816	r_2439	0
36	r_2440	0	r_2440	0
37	r_2441	0	r_2441	0
38	r_2442	0	r_2442	0
39	r_2443	0	r_2443	0
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41	r_2445	0	r_2445	0
42	r_2446	0	r_2446	0.000526915
43	r_2447	2.62E-05	r_2447	0
44	r_2448	0.00E+00	r_2448	0
45	r_2449	0	r_2449	0
46	r_2450	0.00E+00	r_2450	0
47	r_2451	4.72E-05	r_2451	0
48	r_2452	0	r_2452	0
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3	r_2457	0	r_2457	0
4	r_2458	0.00E+00	r_2458	0
5	r_2459	0	r_2459	0
6	r_2460	3.79E-05	r_2460	0
7	r_2461	0	r_2461	0
8	r_2462	0	r_2462	0
9	r_2463	0	r_2463	0
10	r_2464	0	r_2464	0.000474544
11	r_2465	0	r_2465	0
12	r_2466	0.00E+00	r_2466	0
13	r_2467	0	r_2467	0
14	r_2468	0.00E+00	r_2468	0
15	r_2469	0	r_2469	0
16	r_2470	0	r_2470	0
17	r_2471	0	r_2471	0
18	r_2472	0	r_2472	0
19	r_2473	0.00E+00	r_2473	0
20	r_2474	0	r_2474	0
21	r_2475	0	r_2475	0
22	r_2476	0	r_2476	0
23	r_2477	0	r_2477	0
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25	r_2479	0	r_2479	0
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31	r_2485	4.72E-05	r_2485	0
32	r_2486	0	r_2486	0
33	r_2487	0.000189816	r_2487	0
34	r_2488	0.00E+00	r_2488	0.000380074
35	r_2489	0	r_2489	0
36	r_2490	0	r_2490	0
37	r_2491	0.000189816	r_2491	0
38	r_2492	0	r_2492	0
39	r_2493	0	r_2493	0
40	r_2494	0.00E+00	r_2494	0
41	r_2495	0	r_2495	0
42	r_2496	0.00E+00	r_2496	0.000380074
43	r_2497	0	r_2497	0
44	r_2498	0	r_2498	0
45	r_2499	0.000189816	r_2499	0
46	r_2500	0	r_2500	0
47	r_2501	0	r_2501	0
48	r_2502	0.00E+00	r_2502	0
49	r_2503	0	r_2503	0
50	r_2504	0.00E+00	r_2504	0.000380074
51	r_2505	0	r_2505	0
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3	r_2507	0.000189816	r_2507	0
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5	r_2509	0	r_2509	0
6	r_2510	0.00E+00	r_2510	0
7	r_2511	0	r_2511	0
8	r_2512	0	r_2512	0
9	r_2513	0	r_2513	0
10	r_2514	0	r_2514	0
11	r_2515	0	r_2515	0
12	r_2516	0.00E+00	r_2516	0
13	r_2517	0	r_2517	0
14	r_2518	3.79E-05	r_2518	0
15	r_2519	0	r_2519	0
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22	r_2526	0	r_2526	0
23	r_2527	0	r_2527	0
24	r_2528	0	r_2528	0
25	r_2529	0.000184543	r_2529	0
26	r_2530	0	r_2530	0
27	r_2531	0	r_2531	0
28	r_2532	0	r_2532	0
29	r_2533	0	r_2533	0
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25	r_2579	0	r_2579	0
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28	r_2582	0	r_2582	0
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35	r_2589	0	r_2589	0
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46	r_2600	0	r_2600	0
47	r_2601	0	r_2601	0
48	r_2602	0	r_2602	0
49	r_2603	0	r_2603	0
50	r_2604	0	r_2604	0
51	r_2605	0	r_2605	0
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3	r_2607	0	r_2607	0
4	r_2608	0	r_2608	0
5	r_2609	0	r_2609	0
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12	r_2616	0	r_2616	0
13	r_2617	0	r_2617	0
14	r_2618	0	r_2618	0
15	r_2619	0	r_2619	0
16	r_2620	-1000	r_2620	-1000
17	r_2621	1000	r_2621	-1000
18	r_2622	-1000	r_2622	1000
19	r_2623	1000	r_2623	1000
20	r_2624	-1000	r_2624	-1000
21	r_2625	1000	r_2625	1000
22	r_2626	1000	r_2626	-1000
23	r_2627	-1000	r_2627	1000
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40	r_2644	-1000	r_2644	-1000
41	r_2645	1000	r_2645	-1000
42	r_2646	1000	r_2646	1000
43	r_2647	-1000	r_2647	1000
44	r_2648	-1000	r_2648	-1000
45	r_2649	1000	r_2649	-1000
46	r_2650	-1000	r_2650	1000
47	r_2651	1000	r_2651	1000
48	r_2652	-1000	r_2652	-1000
49	r_2653	1000	r_2653	1000
50	r_2654	1000	r_2654	1000
51	r_2655	-1000	r_2655	-1000
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58				
59				
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3	r_2657	-1000	r_2657	-1000
4	r_2658	1000	r_2658	1000
5	r_2659	1000	r_2659	1000
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10	r_2664	-1000	r_2664	-1000
11	r_2665	1000	r_2665	1000
12	r_2666	0	r_2666	1000
13	r_2667	0	r_2667	-1000
14	r_2668	1000	r_2668	-1000
15	r_2669	1000	r_2669	-1000
16	r_2670	-1000	r_2670	1000
17	r_2671	-1000	r_2671	1000
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24	r_2678	-1000	r_2678	1000
25	r_2679	-1000	r_2679	-1000
26	r_2680	1000	r_2680	0
27	r_2681	-1000	r_2681	0
28	r_2682	-1000	r_2682	1000
29	r_2683	1000	r_2683	-1000
30	r_2684	0	r_2684	1000
31	r_2685	-1000	r_2685	1000
32	r_2686	0	r_2686	-1000
33	r_2687	1000	r_2687	-1000
34	r_2688	1000	r_2688	1000
35	r_2689	-1000	r_2689	-1000
36	r_2690	1000	r_2690	1000
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44	r_2698	-1000	r_2698	-1000
45	r_2699	-1000	r_2699	1000
46	r_2700	-1000	r_2700	1000
47	r_2701	1000	r_2701	-1000
48	r_2702	-1000	r_2702	-1000
49	r_2703	1000	r_2703	1000
50	r_2704	1000	r_2704	1000
51	r_2705	-1000	r_2705	1000
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57				
58				
59				
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2	r_2706	1000	r_2706	-1000
3	r_2707	-1000	r_2707	-1000
4	r_2708	-1000	r_2708	1000
5	r_2709	1000	r_2709	1000
6	r_2710	1000	r_2710	-1000
7	r_2711	-1000	r_2711	-1000
8	r_2712	1000	r_2712	1000
9	r_2713	-1000	r_2713	-1000
10	r_2714	1000	r_2714	1000
11	r_2715	-1000	r_2715	-1000
12	r_2716	1000	r_2716	1000
13	r_2717	-1000	r_2717	-1000
14	r_2718	1000	r_2718	-1000
15	r_2719	-1000	r_2719	1000
16	r_2720	1000	r_2720	1000
17	r_2721	-1000	r_2721	-1000
18	r_2722	1000	r_2722	-1000
19	r_2723	-1000	r_2723	1000
20	r_2724	1000	r_2724	1000
21	r_2725	-1000	r_2725	-1000
22	r_2726	-1000	r_2726	0
23	r_2727	1000	r_2727	0
24	r_2728	1000	r_2728	1000
25	r_2729	-1000	r_2729	-1000
26	r_2730	-1000	r_2730	1000
27	r_2731	1000	r_2731	-1000
28	r_2732	1000	r_2732	-1000
29	r_2733	1000	r_2733	1000
30	r_2734	-1000	r_2734	1000
31	r_2735	-1000	r_2735	-1000
32	r_2736	-1000	r_2736	1000
33	r_2737	-1000	r_2737	1000
34	r_2738	1000	r_2738	-1000
35	r_2739	1000	r_2739	-1000
36	r_2740	1000	r_2740	-1000
37	r_2741	-1000	r_2741	0
38	r_2742	-1000	r_2742	0
39	r_2743	1000	r_2743	1000
40	r_2744	1000	r_2744	1000
41	r_2745	1000	r_2745	-1000
42	r_2746	-1000	r_2746	1000
43	r_2747	-1000	r_2747	-1000
44	r_2748	1000	r_2748	1000
45	r_2749	-1000	r_2749	-1000
46	r_2750	1000	r_2750	-1000
47	r_2751	-1000	r_2751	1000
48	r_2752	1000	r_2752	-1000
49	r_2753	-1000	r_2753	1000
50	r_2754	1000	r_2754	-1000
51	r_2755	-1000	r_2755	1000
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54				
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57				
58				
59				
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2	r_2756	-1000	r_2756	-1000
3	r_2757	1000	r_2757	1000
4	r_2758	-1000	r_2758	-1000
5	r_2759	1000	r_2759	1000
6	r_2760	0	r_2760	1000
7	r_2761	0	r_2761	-1000
8	r_2762	1000	r_2762	0
9	r_2763	-1000	r_2763	0
10	r_2764	1000	r_2764	1000
11	r_2765	1000	r_2765	-1000
12	r_2766	-1000	r_2766	1000
13	r_2767	-1000	r_2767	-1000
14	r_2768	-1000	r_2768	-1000
15	r_2769	1000	r_2769	1000
16	r_2770	-1000	r_2770	-1000
17	r_2771	1000	r_2771	1000
18	r_2772	-1000	r_2772	-1000
19	r_2773	-1000	r_2773	1000
20	r_2774	1000	r_2774	1000
21	r_2775	1000	r_2775	-1000
22	r_2776	1000	r_2776	0
23	r_2777	-1000	r_2777	1000
24	r_2778	-1000	r_2778	0
25	r_2779	1000	r_2779	-1000
26	r_2780	1000	r_2780	1000
27	r_2781	-1000	r_2781	1000
28	r_2782	-1000	r_2782	-1000
29	r_2783	1000	r_2783	-1000
30	r_2784	-1000	r_2784	-1000
31	r_2785	-1000	r_2785	1000
32	r_2786	1000	r_2786	-1000
33	r_2787	1000	r_2787	1000
34	r_2788	1000	r_2788	1000
35	r_2789	0	r_2789	-1000
36	r_2790	-1000	r_2790	1000
37	r_2791	0	r_2791	-1000
38	r_2792	1000	r_2792	1000
39	r_2793	1000	r_2793	1000
40	r_2794	-1000	r_2794	-1000
41	r_2795	-1000	r_2795	-1000
42	r_2796	1000	r_2796	1000
43	r_2797	-1000	r_2797	-1000
44	r_2798	-1000	r_2798	1000
45	r_2799	1000	r_2799	-1000
46	r_2800	-1000	r_2800	1000
47	r_2801	-1000	r_2801	-1000
48	r_2802	1000	r_2802	1000
49	r_2803	1000	r_2803	-1000
50	r_2804	-1000	r_2804	-1000
51	r_2805	-1000	r_2805	1000
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56				
57				
58				
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1				
2	r_2806	1000	r_2806	-1000
3	r_2807	1000	r_2807	1000
4	r_2808	1000	r_2808	-1000
5	r_2809	1000	r_2809	1000
6	r_2810	-1000	r_2810	-1000
7	r_2811	-1000	r_2811	1000
8	r_2820	0	r_2820	0
9	r_2821	0	r_2821	0
10	r_2822	0	r_2822	0
11	r_2823	0	r_2823	0
12	r_2824	0	r_2824	0
13	r_2825	0	r_2825	0
14	r_2826	0	r_2826	0
15	r_2827	0	r_2827	0
16	r_2828	0	r_2828	0
17	r_2829	0	r_2829	0
18	r_2830	0	r_2830	0
19	r_2831	0	r_2831	0
20	r_2832	0	r_2832	0
21	r_2833	0	r_2833	0
22	r_2834	0	r_2834	0
23	r_2835	0	r_2835	0
24	r_2836	0	r_2836	0
25	r_2837	0	r_2837	0
26	r_2838	0	r_2838	0
27	r_2839	0	r_2839	0
28	r_2840	0	r_2840	0
29	r_2841	0	r_2841	0
30	r_2842	0	r_2842	0
31	r_2843	0	r_2843	0
32	r_2844	0	r_2844	0
33	r_2845	0	r_2845	0
34	r_2846	0	r_2846	0
35	r_2847	0	r_2847	0
36	r_2848	0	r_2848	0
37	r_2849	0	r_2849	0
38	r_2850	0	r_2850	0
39	r_2851	0	r_2851	0
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41	r_2853	0	r_2853	0
42	r_2854	0	r_2854	0
43	r_2855	0	r_2855	0
44	r_2856	0	r_2856	0
45	r_2857	0	r_2857	0
46	r_2858	0	r_2858	0
47	r_2859	0	r_2859	0
48	r_2860	0	r_2860	0
49	r_2861	0	r_2861	0
50	r_2862	0	r_2862	0
51	r_2863	0	r_2863	0
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54				
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57				
58				
59				
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2	r_2864	0	r_2864	0
3	r_2865	0	r_2865	0
4	r_2866	0	r_2866	0
5	r_2867	0	r_2867	0
6	r_2868	0	r_2868	0
7	r_2869	0	r_2869	0
8	r_2870	0	r_2870	0
9	r_2871	0	r_2871	0
10	r_2872	0	r_2872	0
11	r_2873	0	r_2873	0
12	r_2874	0	r_2874	0
13	r_2875	0	r_2875	0
14	r_2876	0	r_2876	0
15	r_2877	0	r_2877	0
16	r_2878	0	r_2878	0
17	r_2879	0	r_2879	0
18	r_2880	0	r_2880	0
19	r_2881	0	r_2881	0
20	r_2882	0	r_2882	0
21	r_2883	0	r_2883	0
22	r_2884	-0.000137298	r_2884	1000
23	r_2885	999.9999528	r_2885	0
24	r_2886	1000	r_2886	-1000
25	r_2887	1000	r_2887	-1000
26	r_2888	-4.72E-05	r_2888	1000
27	r_2889	-999.9999528	r_2889	-1000
28	r_2890	1000	r_2890	1000
29	r_2891	-1000	r_2891	1000
30	r_2892	0.000137298	r_2892	-1000
31	r_2893	1000	r_2893	1000
32	r_2894	1000	r_2894	1000
33	r_2895	1000	r_2895	1000
34	r_2896	4.72E-05	r_2896	-1000
35	r_2897	1000	r_2897	-1000
36	r_2898	0.000189816	r_2898	-1000
37	r_2899	1000	r_2899	1000
38	r_2900	-1000	r_2900	-1000
39	r_2901	1000	r_2901	-1000
40	r_2902	1000	r_2902	-1000
41	r_2903	-1000	r_2903	-1000
42	r_2904	-1000	r_2904	-1000
43	r_2905	1000	r_2905	-1000
44	r_2906	-1000	r_2906	-1000
45	r_2907	-1000	r_2907	-1000
46	r_2908	-1000	r_2908	-1000
47	r_2909	-1000	r_2909	-1000
48	r_2910	-1000	r_2910	1000
49	r_2911	-1000	r_2911	-1000
50	r_2912	-1000	r_2912	-1000
51	r_2913	-1000	r_2913	1000
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54				
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2	r_2914	999.9998102	r_2914	-1000
3	r_2915	-999.9998102	r_2915	-1000
4	r_2916	1000	r_2916	-1000
5	r_2917	-1000	r_2917	1000
6	r_2918	-1000	r_2918	-1000
7	r_2919	-1000	r_2919	1000
8	r_2920	-1000	r_2920	1000
9	r_2921	-1000	r_2921	1000
10	r_2922	1000	r_2922	0
11	r_2923	1000	r_2923	-1000
12	r_2924	1000	r_2924	1000
13	r_2925	-1000	r_2925	0
14	r_2926	-1000	r_2926	1000
15	r_2927	-1000	r_2927	-1000
16	r_2928	1000	r_2928	1000
17	r_2929	1000	r_2929	1000
18	r_2930	-1000	r_2930	1000
19	r_2931	1000	r_2931	-1000
20	r_2932	-1000	r_2932	1000
21	r_2933	1000	r_2933	-1000
22	r_2934	1000	r_2934	-1000
23	r_2935	999.9998102	r_2935	1000
24	r_2936	1000	r_2936	-1000
25	r_2937	-1000	r_2937	-1000
26	r_2938	0	r_2938	0
27	r_2939	-1000	r_2939	1000
28	r_2940	1000	r_2940	1000
29	r_2941	-1000	r_2941	1000
30	r_2942	-1000	r_2942	1000
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32	r_2944	1000	r_2944	1000
33	r_2945	1000	r_2945	1000
34	r_2946	-1000	r_2946	1000
35	r_2947	1000	r_2947	1000
36	r_2948	-1000	r_2948	1000
37	r_2949	0	r_2949	-1000
38	r_2950	-1000	r_2950	1000
39	r_2951	-999.9998155	r_2951	0
40	r_2952	0	r_2952	-1000
41	r_2953	1000	r_2953	-1000
42	r_2954	-1000	r_2954	1000
43	r_2955	1000	r_2955	-1000
44	r_2956	-0.000137298	r_2956	-1000
45	r_2957	-1000	r_2957	1000
46	r_2958	-1000	r_2958	-1000
47	r_2959	-1000	r_2959	-1000
48	r_2960	-1000	r_2960	1000
49	r_2961	-1000	r_2961	1000
50	r_2962	999.9998155	r_2962	-1000
51	r_2963	-1000	r_2963	1000
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53				
54				
55				
56				
57				
58				
59				
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2	r_2964	-1000	r_2964	1000
3	r_2965	1000	r_2965	1000
4	r_2966	1000	r_2966	1000
5	r_2967	-1000	r_2967	1000
6	r_2968	1000	r_2968	1000
7	r_2969	1000	r_2969	1000
8	r_2970	-1000	r_2970	1000
9	r_2971	1000	r_2971	1000
10	r_2972	1000	r_2972	-1000
11	r_2973	1000	r_2973	1000
12	r_2974	1000	r_2974	1000
13	r_2975	1000	r_2975	1000
14	r_2976	1000	r_2976	1000
15	r_2977	1000	r_2977	-1000
16	r_2978	1000	r_2978	1000
17	r_2979	-1000	r_2979	1000
18	r_2980	1000	r_2980	-1000
19	r_2981	1000	r_2981	-1000
20	r_2982	0	r_2982	1000
21	r_2983	0	r_2983	1000
22	r_2984	-1000	r_2984	-1000
23	r_2985	1000	r_2985	0
24	r_2986	1000	r_2986	1000
25	r_2987	-1000	r_2987	-1000
26	r_2988	1000	r_2988	1000
27	r_2989	-1000	r_2989	0
28	r_2990	1000	r_2990	-1000
29	r_2991	1000	r_2991	-1000
30	r_2992	-1000	r_2992	-1000
31	r_2993	-1000	r_2993	1000
32	r_2994	0.000184543	r_2994	-1000
33	r_2995	-0.000184543	r_2995	-1000
34	r_2996	-999.9998627	r_2996	1000
35	r_2997	-1000	r_2997	-1000
36	r_2998	-1000	r_2998	-1000
37	r_2999	1000	r_2999	1000
38	r_3000	1000	r_3000	1000
39	r_3001	0	r_3001	1000
40	r_3002	-1000	r_3002	-1000
41	r_3003	1000	r_3003	0
42	r_3004	1000	r_3004	-1000
43	r_3005	-1000	r_3005	-1000
44	r_3006	1000	r_3006	-1000
45	r_3007	-1000	r_3007	-1000
46	r_3008	-1000	r_3008	-1000
47	r_3009	-1000	r_3009	-1000
48	r_3010	-1000	r_3010	-1000
49	r_3011	1000	r_3011	-1000
50	r_3022	0	r_3022	0
51	r_3023	0	r_3023	0
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53				
54				
55				
56				
57				
58				
59				
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2	r_3024	0	r_3024	0
3	r_3025	0	r_3025	0
4	r_3026	0	r_3026	0
5	r_3027	0	r_3027	0
6	r_3028	0	r_3028	0
7	r_3029	0	r_3029	0
8	r_3030	0	r_3030	0
9	r_3031	0	r_3031	0
10	r_3032	0	r_3032	0
11	r_3033	0	r_3033	0
12	r_3034	0	r_3034	0
13	r_3035	0	r_3035	0
14	r_3036	0	r_3036	0
15	r_3037	0	r_3037	0
16	r_3038	0	r_3038	0
17	r_3039	0	r_3039	0
18	r_3040	0	r_3040	0
19	r_3041	0	r_3041	0
20	r_3042	0	r_3042	0
21	r_3043	0	r_3043	0
22	r_3044	0	r_3044	0
23	r_3045	0	r_3045	0
24	r_3046	0	r_3046	0
25	r_3047	0	r_3047	0
26	r_3048	0	r_3048	0
27	r_3049	0	r_3049	0
28	r_3050	0	r_3050	0
29	r_3051	0	r_3051	0
30	r_3052	0	r_3052	0
31	r_3053	0	r_3053	0
32	r_3054	0	r_3054	0
33	r_3055	0	r_3055	0
34	r_3056	0	r_3056	0
35	r_3057	0	r_3057	0
36	r_3058	0	r_3058	0
37	r_3059	0	r_3059	0
38	r_3060	0	r_3060	0
39	r_3061	0	r_3061	0
40	r_3062	0	r_3062	0
41	r_3063	0	r_3063	0
42	r_3064	0	r_3064	0
43	r_3065	0	r_3065	0
44	r_3066	0	r_3066	0
45	r_3067	0	r_3067	0
46	r_3068	0	r_3068	0
47	r_3069	0	r_3069	0
48	r_3070	0	r_3070	0
49	r_3071	0	r_3071	0
50	r_3072	0	r_3072	0
51	r_3073	0	r_3073	0
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2	r_3074	0	r_3074	0
3	r_3075	0	r_3075	0
4	r_3076	0	r_3076	0
5	r_3077	0	r_3077	0
6	r_3078	0	r_3078	0
7	r_3079	0	r_3079	0
8	r_3080	0	r_3080	0
9	r_3081	0	r_3081	0
10	r_3082	0	r_3082	0
11	r_3083	0	r_3083	0
12	r_3084	0	r_3084	0
13	r_3085	0	r_3085	0
14	r_3086	0	r_3086	0
15	r_3087	0	r_3087	0
16	r_3088	0	r_3088	0
17	r_3089	0	r_3089	0
18	r_3090	0	r_3090	0
19	r_3091	0	r_3091	0
20	r_3092	0	r_3092	0
21	r_3093	0	r_3093	0
22	r_3094	0	r_3094	0
23	r_3095	0	r_3095	0
24	r_3096	0	r_3096	0
25	r_3097	0	r_3097	0
26	r_3098	0	r_3098	0
27	r_3099	0	r_3099	0
28	r_3100	0	r_3100	0
29	r_3101	0	r_3101	0
30	r_3102	0	r_3102	0
31	r_3103	0	r_3103	0
32	r_3104	0	r_3104	0
33	r_3105	0	r_3105	0
34	r_3106	0	r_3106	0
35	r_3107	0	r_3107	0
36	r_3108	0	r_3108	0
37	r_3109	0	r_3109	0
38	r_3110	0	r_3110	0
39	r_3111	0.000184543	r_3111	0
40	r_3112	0	r_3112	0
41	r_3113	0	r_3113	0
42	r_3114	0	r_3114	0
43	r_3115	0	r_3115	0
44	r_3116	0	r_3116	0
45	r_3117	0	r_3117	0
46	r_3118	0	r_3118	0
47	r_3119	0	r_3119	0
48	r_3120	0	r_3120	0
49	r_3121	0	r_3121	0
50	r_3122	0	r_3122	0
51	r_3123	0	r_3123	0
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2	r_3124	0	r_3124	0
3	r_3125	0	r_3125	0
4	r_3126	0	r_3126	0
5	r_3127	0	r_3127	0
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7	r_3129	0	r_3129	0
8	r_3130	0	r_3130	0
9	r_3131	0	r_3131	0
10	r_3132	0	r_3132	0
11	r_3133	0	r_3133	0
12	r_3134	0	r_3134	0
13	r_3135	0	r_3135	0
14	r_3136	0	r_3136	0
15	r_3137	0	r_3137	0
16	r_3138	0	r_3138	0
17	r_3139	0	r_3139	0
18	r_3140	0	r_3140	0
19	r_3141	0	r_3141	0
20	r_3142	0	r_3142	0
21	r_3143	0	r_3143	0
22	r_3144	0	r_3144	0
23	r_3145	0	r_3145	0
24	r_3146	0	r_3146	0
25	r_3147	0	r_3147	0
26	r_3148	0	r_3148	0
27	r_3149	0	r_3149	0
28	r_3150	0	r_3150	0
29	r_3151	0	r_3151	0
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37	r_3159	0	r_3159	0
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39	r_3161	0	r_3161	0
40	r_3162	0	r_3162	0
41	r_3163	0	r_3163	0
42	r_3164	0	r_3164	0
43	r_3165	0	r_3165	0
44	r_3166	0	r_3166	0
45	r_3167	0	r_3167	0
46	r_3168	0	r_3168	0
47	r_3169	0	r_3169	0
48	r_3170	0	r_3170	0
49	r_3171	0	r_3171	0
50	r_3172	0	r_3172	0
51	r_3173	0	r_3173	0
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54				
55				
56				
57				
58				
59				
60				

1				
2	r_3174	0	r_3174	0
3	r_3175	0	r_3175	0
4	r_3176	0	r_3176	0
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7	r_3329	0	r_3329	0
8	r_3330	0	r_3330	0
9	r_3331	0	r_3331	0
10	r_4039	-3.52E-07	r_4039	0
11	r_4042	0	r_4042	0
12	r_4045	0	r_4045	0
13	r_0964	0	r_0964	0
14	r_1028	0	r_1028	0
15	r_1085	0	r_1085	0
16	r_1086	0	r_1086	0
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18	r_1097	0	r_1097	0
19	r_1098	0	r_1098	0
20	r_1099	0.0125928	r_1099	0.025179928
21	r_1100	0	r_1100	0
22	r_1101	0	r_1101	0
23	r_1103	0	r_1103	0
24	r_1104	0	r_1104	0
25	r_1106	0	r_1106	0
26	r_1107	0	r_1107	0
27	r_1108	0	r_1108	0
28	r_1109	0	r_1109	0
29	r_1110	11.78146162	r_1110	6.042535789
30	r_1111	0	r_1111	0
31	r_1112	-1000	r_1112	-1000
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33	r_1114	0	r_1114	0
34	r_1115	0.298935073	r_1115	0.59773602
35	r_1116	0	r_1116	0
36	r_1118	999.9333264	r_1118	999.8666836
37	r_1119	0	r_1119	0
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39	r_1121	0	r_1121	0
40	r_1122	0	r_1122	0
41	r_1123	0	r_1123	0
42	r_1124	0	r_1124	0
43	r_1125	0	r_1125	0
44	r_1126	-999.978154	r_1126	-999.9563185
45	r_1127	-0.0191928	r_1127	-0.038376955
46	r_1128	-1000	r_1128	-1000
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9	r_1147	0	r_1147	0
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16	r_1165	0	r_1165	0
17	r_1166	1	r_1166	1
18	r_1167	0	r_1167	0
19	r_1168	0	r_1168	0
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21	r_1170	0	r_1170	0
22	r_1171	1000	r_1171	0
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26	r_1175	0	r_1175	0
27	r_1176	0	r_1176	0
28	r_1177	0	r_1177	0
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30	r_1180	0	r_1180	0
31	r_1181	0	r_1181	0
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41	r_1191	0	r_1191	0
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43	r_1193	0	r_1193	0
44	r_1194	0.033510752	r_1194	0.067006409
45	r_1195	0	r_1195	0
46	r_1196	0	r_1196	0
47	r_1197	0	r_1197	0
48	r_1198	0	r_1198	0
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50	r_1200	0	r_1200	0
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19	r_1219	0	r_1219	0
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35	r_1235	0	r_1235	0
36	r_1236	0	r_1236	0
37	r_1237	0.0143176	r_1237	0.028628751
38	r_1238	0	r_1238	0
39	r_1239	0	r_1239	0
40	r_1240	0	r_1240	0
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44	r_1244	0.057617561	r_1244	0.115209696
45	r_1245	11.76226952	r_1245	4.342507856
46	r_1246	0	r_1246	0
47	r_1247	0	r_1247	0
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57	r_1257	0	r_1257	0

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21	r_1277	-13.03453926	r_1277	-3.722077947
22	r_1278	0	r_1278	0
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25	r_1281	-1000	r_1281	-1000
26	r_1282	4.40E-08	r_1282	8.80E-08
27	r_1283	0	r_1283	0
28	r_1284	0	r_1284	0
29	r_1285	0	r_1285	0
30	r_1286	0	r_1286	0
31	r_1287	0	r_1287	0
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33	r_1289	0	r_1289	0
34	r_1290	4.40E-08	r_1290	8.80E-08
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42	r_1299	0	r_1299	0
43	r_1300	-1000	r_1300	-1000
44	r_1301	0	r_1301	0
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3	r_2132	0	r_2132	0
4	r_2219	0	r_2219	0
5	r_2220	0	r_2220	0
6	r_2221	0	r_2221	0
7	r_2222	0	r_2222	0
8	r_2223	0	r_2223	0
9	r_2224	0	r_2224	0
10	r_2225	0	r_2225	0
11	r_2226	0	r_2226	0
12	r_2227	0	r_2227	0
13	r_2228	0	r_2228	0
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15	r_3349	0	r_3349	0
16	r_3350	0	r_3350	0
17	r_3351	0	r_3351	0
18	r_3352	0.00E+00	r_3352	0
19	r_3353	0	r_3353	0
20	r_3354	1.90E-05	r_3354	0
21	r_3355	0	r_3355	0
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49	r_3383	0	r_3383	0
50	r_3384	0	r_3384	0
51	r_3385	0	r_3385	0
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54				
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57				
58				
59				
60				

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2	r_3386	0	r_3386	0
3	r_3387	0	r_3387	0
4	r_3388	0	r_3388	0
5	r_3389	0	r_3389	0
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13	r_3397	0	r_3397	0
14	r_3398	0	r_3398	0
15	r_3399	0	r_3399	0
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17	r_3401	0	r_3401	0
18	r_3402	0	r_3402	0
19	r_3403	0	r_3403	0
20	r_3404	0	r_3404	0
21	r_3405	0	r_3405	0
22	r_3406	0	r_3406	0
23	r_3407	0	r_3407	0
24	r_3408	0	r_3408	0
25	r_3409	0	r_3409	0
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27	r_3411	0	r_3411	0
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29	r_3413	0	r_3413	0
30	r_3414	0	r_3414	0
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32	r_3416	0	r_3416	0
33	r_3417	0	r_3417	0
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36	r_3420	0	r_3420	0
37	r_3421	0	r_3421	0
38	r_3422	0	r_3422	0
39	r_3423	0	r_3423	0
40	r_3424	0	r_3424	0
41	r_3425	0	r_3425	0
42	r_3426	0	r_3426	0
43	r_3427	0	r_3427	0
44	r_3428	0	r_3428	3.79E-05
45	r_3429	0	r_3429	0
46	r_3430	0	r_3430	0
47	r_3431	0	r_3431	0
48	r_3432	0.00E+00	r_3432	0
49	r_3433	0	r_3433	0
50	r_3434	1.90E-05	r_3434	0
51	r_3435	0	r_3435	0
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57				
58				
59				
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3	r_3437	0	r_3437	0
4	r_3438	0	r_3438	0
5	r_3439	0	r_3439	0
6	r_3440	0	r_3440	0
7	r_3441	0	r_3441	0
8	r_3442	0	r_3442	0
9	r_3443	0	r_3443	0
10	r_3444	0	r_3444	0
11	r_3445	0	r_3445	0
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29	r_3463	0	r_3463	0
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32	r_3466	0	r_3466	0
33	r_3467	0	r_3467	0
34	r_3468	0	r_3468	0
35	r_3469	0	r_3469	0
36	r_3470	0	r_3470	0
37	r_3471	0	r_3471	0
38	r_3472	0	r_3472	0
39	r_3473	0	r_3473	0
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41	r_3475	0	r_3475	0
42	r_3476	0	r_3476	0
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46	r_3480	0	r_3480	0
47	r_3481	0	r_3481	0
48	r_3482	0	r_3482	0
49	r_3483	0	r_3483	0
50	r_3484	0	r_3484	0
51	r_3485	0	r_3485	0
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3	r_3487	0	r_3487	0
4	r_3488	0	r_3488	0
5	r_3489	0	r_3489	0
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13	r_3497	0	r_3497	0
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15	r_3499	0	r_3499	0
16	r_3500	0	r_3500	0
17	r_3501	0	r_3501	0
18	r_3502	0	r_3502	0
19	r_3503	0	r_3503	0
20	r_3504	0	r_3504	0
21	r_3505	0	r_3505	0
22	r_3506	0	r_3506	0
23	r_3507	0	r_3507	0
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25	r_1358	0	r_1358	0
26	r_1359	1.83E-05	r_1359	3.67E-05
27	r_1360	0	r_1360	0
28	r_1361	0	r_1361	0
29	r_1362	0	r_1362	0
30	r_1363	0	r_1363	0
31	r_1364	0	r_1364	0
32	r_1365	0	r_1365	0
33	r_1366	0	r_1366	0
34	r_1367	0	r_1367	0
35	r_1368	0	r_1368	0
36	r_1369	0	r_1369	0
37	r_1370	0	r_1370	0
38	r_1371	0	r_1371	0
39	r_1372	0	r_1372	0
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41	r_1374	0	r_1374	0
42	r_1375	0	r_1375	0
43	r_1376	0	r_1376	0
44	r_1377	0	r_1377	0
45	r_1378	0	r_1378	0
46	r_1379	0	r_1379	0
47	r_1380	0	r_1380	0
48	r_1381	0	r_1381	0
49	r_1382	0	r_1382	0
50	r_1383	0	r_1383	0
51	r_1384	0	r_1384	0
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57				
58				
59				
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2	r_1385	0	r_1385	0
3	r_1386	0	r_1386	0
4	r_1387	0	r_1387	0
5	r_1388	0	r_1388	0
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8	r_1391	0	r_1391	0
9	r_1392	0	r_1392	0
10	r_1393	0	r_1393	0
11	r_1394	0	r_1394	0
12	r_1395	0	r_1395	0
13	r_1396	0	r_1396	0
14	r_1397	0	r_1397	0
15	r_1398	-1000	r_1398	-1000
16	r_1399	0	r_1399	0
17	r_1400	0	r_1400	0
18	r_1401	0	r_1401	0
19	r_1449	0	r_1449	0
20	r_1450	0	r_1450	0
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22	r_1452	0	r_1452	0
23	r_1453	0	r_1453	0
24	r_1454	0	r_1454	0
25	r_1455	0	r_1455	0
26	r_1456	0	r_1456	0
27	r_1457	0	r_1457	0
28	r_1458	0	r_1458	0
29	r_1459	0	r_1459	0
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32	r_1462	0	r_1462	0
33	r_1463	0	r_1463	0
34	r_1464	0	r_1464	0
35	r_1465	0	r_1465	0
36	r_1466	0	r_1466	0
37	r_1467	0	r_1467	0
38	r_1468	0	r_1468	0
39	r_1469	0	r_1469	0
40	r_1470	0	r_1470	0
41	r_1471	0	r_1471	0
42	r_1472	0	r_1472	0
43	r_1473	0	r_1473	0
44	r_1474	0	r_1474	0
45	r_1475	0	r_1475	0
46	r_1476	0	r_1476	0
47	r_1477	0	r_1477	0
48	r_1478	0	r_1478	0
49	r_1479	1.90E-05	r_1479	3.79E-05
50	r_1480	0	r_1480	0
51	r_1481	0	r_1481	0
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57				
58				
59				
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2	r_1482	0	r_1482	0
3	r_1483	0	r_1483	0
4	r_1484	0	r_1484	0
5	r_1485	0	r_1485	0
6	r_1486	0	r_1486	0
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8	r_1488	0	r_1488	0
9	r_1489	0	r_1489	0
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12	r_1492	0	r_1492	0
13	r_1493	0	r_1493	0
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17	r_1497	0	r_1497	0
18	r_1498	0	r_1498	0
19	r_1499	0	r_1499	0
20	r_1500	0	r_1500	0
21	r_1501	0	r_1501	0
22	r_1502	0	r_1502	0
23	r_1503	0	r_1503	0
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25	r_1505	0	r_1505	0
26	r_1506	0	r_1506	0
27	r_1507	0	r_1507	0
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29	r_1509	0	r_1509	0
30	r_1510	0	r_1510	0
31	r_1511	0	r_1511	0
32	r_1512	0	r_1512	0
33	r_1513	0	r_1513	0
34	r_1514	0	r_1514	0
35	r_1515	0	r_1515	0
36	r_1516	0	r_1516	0
37	r_1517	0	r_1517	0
38	r_1518	0	r_1518	0
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41	r_1521	0	r_1521	0
42	r_1522	0	r_1522	0
43	r_1523	0	r_1523	0
44	r_1524	0	r_1524	0
45	r_1525	0	r_1525	0
46	r_1526	0	r_1526	0
47	r_1527	0	r_1527	0
48	r_1528	0	r_1528	0
49	r_1529	0	r_1529	0
50	r_1530	0	r_1530	0
51	r_1531	0	r_1531	0
52				
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56				
57				
58				
59				
60				

1				
2	r_1532	0	r_1532	0
3	r_1533	0	r_1533	0
4	r_1534	0	r_1534	0
5	r_1535	0	r_1535	0
6	r_1536	0	r_1536	0
7	r_1537	0	r_1537	0
8	r_1538	0	r_1538	0
9	r_3963	0	r_3963	0.00020721
10	r_3964	1.04E-04	r_3964	0
11	r_3965	0	r_3965	0
12	r_3966	0	r_3966	0
13	r_3967	0	r_3967	0
14	r_3968	0	r_3968	0
15	r_3969	0	r_3969	0
16	r_3970	0	r_3970	0
17	r_3971	3.74E-05	r_3971	0
18	r_3972	0	r_3972	7.14E-05
19	r_3974	0	r_3974	0
20	r_3975	0	r_3975	2.95E-05
21	r_3976	1.47E-05	r_3976	0
22	r_3977	0.00E+00	r_3977	0
23	r_3978	0	r_3978	0
24	r_3979	0	r_3979	5.24E-05
25	r_3980	2.62E-05	r_3980	0
26	r_3981	0	r_3981	0
27	r_3982	0	r_3982	0
28	r_3983	0	r_3983	0
29	r_3984	0	r_3984	0
30	r_3985	0	r_3985	0
31	r_3986	0	r_3986	0
32	r_3988	0.00E+00	r_3988	0.000380074
33	r_3989	0.000184543	r_3989	0
34	r_3990	0	r_3990	0
35	r_3991	5.27E-06	r_3991	0
36	r_3992	0	r_3992	0
37	r_3993	0.00E+00	r_3993	0
38	r_3994	0.00E+00	r_3994	0
39	r_3995	0	r_3995	0
40	r_3997	0	r_3997	9.45E-05
41	r_3998	4.72E-05	r_3998	0
42	r_3999	0	r_3999	0
43	r_4000	0	r_4000	0
44	r_4001	0	r_4001	0
45	r_4002	0.00E+00	r_4002	0
46	r_4003	0	r_4003	0
47	r_4004	0	r_4004	0
48	r_4006	0	r_4006	0.000109132
49	r_4007	0	r_4007	0
50	r_4008	0	r_4008	0
51	r_4009	0	r_4009	0
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57				
58				
59				
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1				
2	r_4010	0	r_4010	0
3	r_4011	0	r_4011	0
4	r_4012	0	r_4012	0
5	r_4013	0	r_4013	0
6	r_4014	0	r_4014	0
7	r_4015	0	r_4015	0
8	r_4016	0	r_4016	0
9	r_4017	0	r_4017	0
10	r_4018	0.00E+00	r_4018	0
11	r_4019	0	r_4019	0
12	r_4020	0	r_4020	0
13	r_4021	0	r_4021	0
14	r_4022	0	r_4022	0
15	r_4023	0	r_4023	0
16	r_4024	0	r_4024	0
17	r_4025	0	r_4025	0
18	r_4026	0	r_4026	0
19	r_4027	0	r_4027	0
20	r_4028	0	r_4028	0
21	r_4029	0	r_4029	0
22	r_4030	0	r_4030	0
23	r_4031	0	r_4031	0
24	r_4032	5.25E-05	r_4032	0
25	r_4033	0	r_4033	0
26	r_4034	0	r_4034	0
27	r_4035	0	r_4035	0
28	r_4036	0	r_4036	0
29	r_4037	0	r_4037	0
30	r_1542	0	r_1542	0
31	r_1543	0.0499312	r_1543	0.099839909
32	r_1545	0	r_1545	0
33	r_1546	0	r_1546	0
34	r_1547	0	r_1547	0
35	r_1548	0	r_1548	0
36	r_1549	0	r_1549	0
37	r_1550	0	r_1550	0
38	r_1551	0	r_1551	0
39	r_1552	0	r_1552	0
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41	r_1554	0	r_1554	0
42	r_1560	0	r_1560	0
43	r_1562	0	r_1562	0
44	r_1563	0	r_1563	0
45	r_1564	0	r_1564	0
46	r_1565	0	r_1565	0
47	r_1566	0	r_1566	0
48	r_1567	-0.0191928	r_1567	-0.038376955
49	r_1568	0	r_1568	0
50	r_1572	0	r_1572	0
51	r_1573	0	r_1573	0
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2	r_1574	-0.0130416	r_1574	-0.026077326
3	r_1575	0	r_1575	0
4	r_1576	0	r_1576	0
5	r_1577	0	r_1577	0
6	r_1578	0	r_1578	0
7	r_1579	0	r_1579	0
8	r_1580	0	r_1580	0
9	r_1581	0	r_1581	0
10	r_1582	0	r_1582	0
11	r_1583	0	r_1583	0
12	r_1585	0.0002904	r_1585	0.000580669
13	r_1586	0	r_1586	0
14	r_1587	0	r_1587	0
15	r_1588	1000	r_1588	1000
16	r_1589	0	r_1589	0
17	r_1590	0	r_1590	0
18	r_1591	0	r_1591	0
19	r_1595	0	r_1595	0.026077326
20	r_1596	-0.0084788	r_1596	-0.016953781
21	r_1597	0	r_1597	0
22	r_1598	0	r_1598	0
23	r_1599	0	r_1599	0
24	r_1600	0	r_1600	0
25	r_1601	0	r_1601	0
26	r_1603	0	r_1603	0
27	r_1604	0	r_1604	0
28	r_1605	0	r_1605	0
29	r_1606	0	r_1606	0
30	r_1607	0	r_1607	0
31	r_1608	0	r_1608	0
32	r_1609	0	r_1609	0
33	r_1610	0	r_1610	0
34	r_1611	0	r_1611	0
35	r_1613	0	r_1613	0
36	r_1614	0	r_1614	0
37	r_1615	0	r_1615	0
38	r_1616	0	r_1616	0
39	r_1617	0	r_1617	0
40	r_1618	0	r_1618	0
41	r_1620	0	r_1620	0
42	r_1622	-3.52E-07	r_1622	-7.04E-07
43	r_1623	0	r_1623	0
44	r_1624	0	r_1624	0
45	r_1625	0	r_1625	0
46	r_1627	0	r_1627	0
47	r_1628	0	r_1628	0
48	r_1629	0	r_1629	0
49	r_1630	0	r_1630	0
50	r_1631	0	r_1631	0
51	r_1632	-1000	r_1632	-1000
52				
53				
54				
55				
56				
57				
58				
59				
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1				
2	r_1633	0	r_1633	0
3	r_1634	0	r_1634	0
4	r_1635	0	r_1635	0
5	r_1637	0	r_1637	0
6	r_1638	0	r_1638	0
7	r_1639	0	r_1639	0
8	r_1640	0	r_1640	0
9	r_1641	0	r_1641	0
10	r_1642	0	r_1642	0
11	r_1643	0	r_1643	0
12	r_1644	0	r_1644	0
13	r_1645	0	r_1645	0
14	r_1647	0	r_1647	0
15	r_1648	0	r_1648	0
16	r_1649	0	r_1649	0
17	r_1650	0	r_1650	0
18	r_1651	0	r_1651	0
19	r_1652	1000	r_1652	1000
20	r_1654	-0.298935073	r_1654	-0.59773602
21	r_1656	0	r_1656	0
22	r_1658	0	r_1658	0
23	r_1659	0	r_1659	0
24	r_1660	0	r_1660	0
25	r_1661	0	r_1661	0
26	r_1663	0	r_1663	0
27	r_1664	0	r_1664	0
28	r_1665	-999.8898036	r_1665	1000
29	r_1667	1000	r_1667	-999.7893604
30	r_1668	0	r_1668	0
31	r_1669	999.8898036	r_1669	-1000
32	r_1671	0	r_1671	0
33	r_1672	3.959301649	r_1672	1.963804432
34	r_1673	0	r_1673	0
35	r_1674	0	r_1674	0
36	r_1675	0	r_1675	0
37	r_1676	-1.90E-05	r_1676	-3.79E-05
38	r_1677	0	r_1677	0
39	r_1678	0	r_1678	0
40	r_1679	0	r_1679	0
41	r_1680	0	r_1680	0
42	r_1681	0	r_1681	0
43	r_1682	0.000289252	r_1682	0.000575126
44	r_1683	0	r_1683	0
45	r_1684	0.000184543	r_1684	0
46	r_1685	0	r_1685	0
47	r_1686	0	r_1686	0
48	r_1687	0	r_1687	0
49	r_1688	0	r_1688	0
50	r_1689	0	r_1689	0
51	r_1690	0	r_1690	0
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2	r_1691	-1.90E-05	r_1691	-3.79E-05
3	r_1694	999.8898036	r_1694	-1000
4	r_1695	0	r_1695	0
5	r_1696	-0.16915278	r_1696	-0.932731906
6	r_1697	3.959301649	r_1697	1.963804432
7	r_1698	-1.90E-05	r_1698	-3.79E-05
8	r_1699	0	r_1699	0
9	r_1700	0	r_1700	0
10	r_1701	1.83E-05	r_1701	3.67E-05
11	r_1702	0	r_1702	0
12	r_1703	0	r_1703	0
13	r_1704	-0.000264	r_1704	-0.000493482
14	r_1705	0	r_1705	0
15	r_1706	0	r_1706	0
16	r_1707	0	r_1707	0
17	r_1708	0.0191928	r_1708	0.038376955
18	r_1709	0	r_1709	0
19	r_1710	0	r_1710	0
20	r_1711	0	r_1711	0
21	r_1712	0	r_1712	0
22	r_1713	0	r_1713	0
23	r_1714	-1	r_1714	-1
24	r_1715	0	r_1715	0
25	r_1716	0	r_1716	0
26	r_1717	0	r_1717	0
27	r_1718	0	r_1718	0
28	r_1719	0	r_1719	0
29	r_1720	0	r_1720	0
30	r_1721	0	r_1721	0
31	r_1722	0	r_1722	0
32	r_1723	0	r_1723	0
33	r_1724	0	r_1724	0
34	r_1725	0	r_1725	0
35	r_1726	0	r_1726	0
36	r_1727	0	r_1727	0
37	r_1728	0	r_1728	0
38	r_1729	-0.0001584	r_1729	-0.000316729
39	r_1730	0	r_1730	0
40	r_1731	0	r_1731	0
41	r_1732	0	r_1732	0
42	r_1733	0	r_1733	0
43	r_1734	0	r_1734	0
44	r_1735	0	r_1735	0
45	r_1736	0	r_1736	0
46	r_1737	0	r_1737	0
47	r_1738	0	r_1738	0
48	r_1739	0	r_1739	0
49	r_1743	0	r_1743	0
50	r_1744	0	r_1744	0
51	r_1745	0	r_1745	0
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2	r_1746	-0.0004194	r_1746	0
3	r_1747	0	r_1747	0
4	r_1748	-0.0355476	r_1748	-0.071079188
5	r_1749	0	r_1749	0
6	r_1750	0	r_1750	0
7	r_1751	0	r_1751	0
8	r_1752	0	r_1752	0
9	r_1753	0	r_1753	0
10	r_1754	0.000283752	r_1754	0.000564129
11	r_1757	0	r_1757	0
12	r_1758	1000	r_1758	1000
13	r_1759	0	r_1759	0
14	r_1760	-1000	r_1760	-1000
15	r_1761	0	r_1761	0
16	r_1762	0	r_1762	0
17	r_1763	-1000	r_1763	-1000
18	r_1764	0	r_1764	0
19	r_1765	0	r_1765	0
20	r_1766	4.40E-08	r_1766	8.80E-08
21	r_1770	0	r_1770	0
22	r_1771	0	r_1771	0
23	r_1772	0	r_1772	0
24	r_1774	0	r_1774	0
25	r_1775	0	r_1775	0
26	r_1776	0	r_1776	0
27	r_1777	0	r_1777	0
28	r_1788	0	r_1788	0
29	r_1790	0	r_1790	0
30	r_1791	0	r_1791	0
31	r_1792	0	r_1792	0
32	r_1793	0.002680347	r_1793	0
33	r_1794	0	r_1794	0
34	r_1795	-0.002680347	r_1795	0
35	r_1796	0	r_1796	0
36	r_1797	0	r_1797	0
37	r_1798	0	r_1798	0
38	r_1800	0	r_1800	0
39	r_1801	1.90E-05	r_1801	3.79E-05
40	r_1802	0	r_1802	0
41	r_1803	1.90E-05	r_1803	3.79E-05
42	r_1805	0	r_1805	0
43	r_1806	0	r_1806	0
44	r_1807	0	r_1807	0
45	r_1808	0	r_1808	0
46	r_1809	-0.0004194	r_1809	0
47	r_1810	0	r_1810	0
48	r_1811	3.52E-07	r_1811	1.136965218
49	r_1812	0	r_1812	0
50	r_1813	0	r_1813	0
51	r_1814	0	r_1814	0
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2	r_1815	0	r_1815	0	
3	r_1816	0	r_1816	0	
4	r_1817	0	r_1817	0	
5	r_1818	0	r_1818	0	
6	r_1819	0	r_1819	0	
7	r_1820	0	r_1820	0	
8	r_1821	0	r_1821	0	
9	r_1822	0	r_1822	0	
10	r_1823	0	r_1823	0	
11					
12	r_1824	-992.471365	r_1824	-0.348612669	
13	r_1825	-0.034922905	r_1825	-0.069836573	
14	r_1826	0	r_1826	0	
15	r_1827	0	r_1827	0	
16	r_1829	999.8898036	r_1829	-1000	
17	r_1830	0	r_1830	0	
18	r_1831	1000	r_1831	1000	
19	r_1832	-7.586252582	r_1832	0.233402973	
20	r_1833	0	r_1833	0	
21	r_1834	0	r_1834	0	
22	r_1835	0	r_1835	0	
23	r_1836	0	r_1836	0	
24	r_1837	0	r_1837	0	
25	r_1839	0	r_1839	0	
26					
27	r_1840	-0.001818276	r_1840	-0.003616249	
28	r_1841	0	r_1841	0	
29	r_1842	0	r_1842	0	
30	r_1843	0	r_1843	0	
31	r_1844	0	r_1844	0	
32	r_1845	0	r_1845	0	
33	r_1846	0	r_1846	0	
34	r_1847	0	r_1847	0	
35	r_1848	0	r_1848	0	
36	r_1849	0	r_1849	0	
37	r_1850	0	r_1850	0	
38	r_1851	0	r_1851	0	
39	r_1852	0	r_1852	0	
40	r_1853	0	r_1853	0	
41	r_1854	0	r_1854	0	
42	r_1855	0	r_1855	0	
43	r_1856	0	r_1856	0	
44	r_1857	0	r_1857	0	
45	r_1858	0	r_1858	0	
46	r_1859	0	r_1859	0	
47	r_1860	0	r_1860	0	
48					
49	r_1861	-4.40E-08	r_1861	-8.80E-08	
50	r_1862	0	r_1862	0	
51	r_1863	0	r_1863	0	
52	r_1864	0	r_1864	0	
53	r_1865	0	r_1865	0	
54	r_1866	0	r_1866	0	
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56					
57					
58					
59					
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2	r_1867	0	r_1867	0
3	r_1868	0	r_1868	0
4	r_1869	0	r_1869	0
5	r_1870	0	r_1870	0
6	r_1871	0	r_1871	0
7	r_1872	0	r_1872	0
8	r_1873	0	r_1873	0
9	r_1874	0.0171116	r_1874	0
10	r_1875	0	r_1875	0
11	r_1876	0	r_1876	0
12	r_1877	0	r_1877	0
13	r_1878	0	r_1878	0
14	r_1879	0	r_1879	0
15	r_1880	0	r_1880	0
16	r_1881	0	r_1881	0
17	r_1882	0	r_1882	0
18	r_1883	0	r_1883	0
19	r_1884	0	r_1884	0
20	r_1885	0	r_1885	0
21	r_1886	0	r_1886	0
22	r_1887	0.0072468	r_1887	0.014490336
23	r_1889	0	r_1889	0
24	r_1890	0	r_1890	0
25	r_1891	0	r_1891	0
26	r_1892	0	r_1892	0
27	r_1893	0	r_1893	0
28	r_1895	0	r_1895	0
29	r_1896	0	r_1896	0
30	r_1897	0	r_1897	0
31	r_1898	0	r_1898	0
32	r_1899	0	r_1899	0
33	r_1900	0	r_1900	0
34	r_1901	-1000	r_1901	-1000
35	r_1902	0	r_1902	0
36	r_1903	0	r_1903	0
37	r_1904	0	r_1904	0
38	r_1905	0	r_1905	0
39	r_1906	0	r_1906	0
40	r_1907	1.90E-05	r_1907	3.79E-05
41	r_1908	0	r_1908	0
42	r_1909	0	r_1909	0
43	r_1910	0	r_1910	0
44	r_1911	0	r_1911	0
45	r_1912	0	r_1912	0
46	r_1913	0	r_1913	0
47	r_1914	0	r_1914	0
48	r_1915	0	r_1915	0
49	r_1916	0	r_1916	0
50	r_1919	0	r_1919	0
51	r_1920	0	r_1920	0
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54				
55				
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57				
58				
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2	r_1921	0	r_1921	0	
3	r_1922	0	r_1922	0	
4	r_1923	0	r_1923	0	
5	r_1924	0	r_1924	0	
6	r_1925	0	r_1925	0	
7	r_1926	0	r_1926	0	
8	r_1927	0	r_1927	0	
9	r_1928	0	r_1928	0	
10	r_1929	0	r_1929	0	
11	r_1930	0	r_1930	0	
12	r_1931	0	r_1931	0	
13	r_1932	-0.0355476	r_1932	-0.071079188	
14	r_1935	0	r_1935	0	
15	r_1936	0	r_1936	0	
16	r_1937	0	r_1937	0	
17	r_1938	0	r_1938	0	
18	r_1939	0	r_1939	0	
19	r_1940	0	r_1940	0	
20	r_1941	0	r_1941	0	
21	r_1942	0	r_1942	0	
22	r_1943	0	r_1943	0	
23	r_1944	0	r_1944	0	
24	r_1945	0	r_1945	0	
25	r_1946	0	r_1946	0	
26	r_1947	0	r_1947	0	
27	r_1952	0	r_1952	0	
28	r_1963	-0.000605736	r_1963	-0.001204704	
29	r_1964	0.000605736	r_1964	0.001204704	
30	r_1965	-0.0081884	r_1965	-0.584855369	
31	r_1966	0	r_1966	0	
32	r_1967	0	r_1967	0	
33	r_1968	0	r_1968	0	
34	r_1970	0	r_1970	0	
35	r_1971	0	r_1971	0	
36	r_1972	0	r_1972	0	
37	r_1974	0	r_1974	0	
38	r_1975	0	r_1975	0	
39	r_1976	0	r_1976	0	
40	r_1977	0.000303024	r_1977	0.000602664	
41	r_1978	3.935876922	r_1978	1.909945747	
42	r_1979	3.962803203	r_1979	1.962778781	
43	r_1980	0	r_1980	0	
44	r_1981	0	r_1981	0	
45	r_1984	0	r_1984	0	
46	r_1987	0	r_1987	0	
47	r_1988	0	r_1988	0	
48	r_1989	0	r_1989	0	
49	r_1990	0	r_1990	0	
50	r_1991	0	r_1991	0	
51	r_1992	-3.962803203	r_1992	-1.962778781	
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56					
57					
58					
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2	r_1993	0	r_1993	0
3	r_1994	0	r_1994	0
4	r_1995	1.90E-05	r_1995	3.79E-05
5	r_1996	0	r_1996	0
6	r_1997	0	r_1997	0
7	r_1998	0	r_1998	0
8	r_1999	0	r_1999	0
9	r_2000	0	r_2000	0
10	r_2001	0	r_2001	0
11	r_2002	0	r_2002	0
12	r_2003	0	r_2003	0
13	r_2004	0	r_2004	0
14	r_2005	-0.057617561	r_2005	-0.115209696
15	r_2008	0	r_2008	0
16	r_2020	0	r_2020	0
17	r_2022	4.40E-08	r_2022	8.80E-08
18	r_2023	0	r_2023	0
19	r_2024	0	r_2024	0
20	r_2025	0	r_2025	0
21	r_2026	0	r_2026	0
22	r_2027	0	r_2027	0
23	r_2028	0	r_2028	0
24	r_2030	4.36E-05	r_2030	8.71E-05
25	r_2031	0	r_2031	0
26	r_2032	-3.96E-07	r_2032	0.830825401
27	r_2033	0	r_2033	0
28	r_2036	0	r_2036	0
29	r_2037	0	r_2037	0
30	r_2038	0	r_2038	0
31	r_2039	0	r_2039	0
32	r_2040	0	r_2040	0
33	r_2041	0	r_2041	0
34	r_2042	0	r_2042	0
35	r_2043	0	r_2043	0
36	r_2044	0	r_2044	0
37	r_2045	0	r_2045	-0.568482257
38	r_2046	0	r_2046	0
39	r_2049	0	r_2049	0
40	r_2050	0	r_2050	0
41	r_2051	0	r_2051	0
42	r_2052	0	r_2052	0
43	r_2053	0.000303024	r_2053	0.000602664
44	r_2054	0.000303024	r_2054	0.000602664
45	r_2055	0	r_2055	0
46	r_2056	0.0048664	r_2056	0
47	r_2057	-0.0048664	r_2057	0
48	r_2058	0	r_2058	0
49	r_2060	-0.0034012	r_2060	-0.006800868
50	r_2061	0	r_2061	0
51	r_2062	0	r_2062	0
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1					
2	r_2063	0	r_2063	0	
3	r_2064	0	r_2064	0	
4	r_2065	0	r_2065	0	
5	r_2066	0	r_2066	0	
6	r_2067	0	r_2067	0	
7	r_2068	0	r_2068	0	
8	r_2069	0	r_2069	0	
9	r_2070	0	r_2070	0	
10	r_2071	0	r_2071	0	
11	r_2072	0.0081884	r_2072	0.016373112	
12	r_2073	0	r_2073	0	
13	r_2074	0	r_2074	0	
14	r_2075	0	r_2075	0	
15	r_2080	0	r_2080	0	
16	r_2082	0	r_2082	0	
17	r_2083	0	r_2083	0	
18	r_2084	0	r_2084	0	
19	r_2085	0	r_2085	0	
20	r_2086	0	r_2086	0	
21	r_2087	0	r_2087	0	
22	r_2089	0	r_2089	0	
23	r_2090	0	r_2090	0	
24	r_2091	0	r_2091	0	
25	r_2092	0	r_2092	0	
26	r_2093	999.9883576	r_2093	999.9767204	
27	r_2094	-0.000303024	r_2094	-0.000602664	
28	r_2095	0	r_2095	0	
29	r_2096	-19.60922416	r_2096	-8.375173406	
30	r_2097	-999.8898036	r_2097	1000	
31	r_2098	0	r_2098	0	
32	r_2099	0	r_2099	0	
33	r_2100	13.03453926	r_2100	3.722077947	
34	r_2101	0	r_2101	0	
35	r_2102	0	r_2102	0	
36	r_2103	0	r_2103	0	
37	r_2104	0	r_2104	0	
38	r_2105	0	r_2105	0	
39	r_2106	0	r_2106	0	
40	r_2107	0	r_2107	0	
41	r_2108	0.044	r_2108	0.087980181	
42	r_2110	0	r_2110	0	
43	r_2111	0.044	r_2111	0.087980181	
44	r_2125	999.9989808	r_2125	999.9979518	
45	r_2129	0	r_2129	0	
46	r_2133	0	r_2133	0	
47	r_2134	0	r_2134	0	
48	r_2136	0	r_2136	0	
49	r_2137	0	r_2137	0	
50	r_2139	0	r_2139	0	
51	r_2184	0	r_2184	0	
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57					
58					
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1				
2	r_2185	0	r_2185	0
3	r_2186	0	r_2186	0
4	r_2187	0	r_2187	0
5	r_2188	0	r_2188	0
6	r_2189	0	r_2189	0
7	r_2190	0	r_2190	0
8	r_2191	0	r_2191	0
9	r_2192	0	r_2192	0
10	r_2193	0	r_2193	0
11	r_2229	0	r_2229	0
12	r_2230	0	r_2230	0
13	r_2231	0	r_2231	0
14	r_2812	0	r_2812	0
15	r_2813	0	r_2813	0
16	r_2814	0	r_2814	0
17	r_2815	0	r_2815	0
18	r_2816	0	r_2816	0
19	r_2817	0	r_2817	0
20	r_2818	0	r_2818	0
21	r_2819	0	r_2819	0
22	r_3332	0	r_3332	0
23	r_3333	0	r_3333	0
24	r_3334	0	r_3334	0
25	r_3335	0	r_3335	0
26	r_3336	0	r_3336	0
27	r_3337	0	r_3337	0
28	r_3338	0	r_3338	0
29	r_3339	0	r_3339	0
30	r_3340	0	r_3340	0
31	r_3341	0	r_3341	0
32	r_3342	0	r_3342	0
33	r_3343	0	r_3343	0
34	r_3344	0	r_3344	0
35	r_3345	0	r_3345	0
36	r_3346	0	r_3346	0
37	r_3347	0	r_3347	0
38	r_3508	0	r_3508	0
39	r_3509	0	r_3509	0
40	r_3510	-999.9991144	r_3510	999.9998614
41	r_3511	999.999938	r_3511	-1000
42	r_3512	1000	r_3512	-999.9998906
43	r_3513	-1000	r_3513	0.001938829
44	r_3514	5.69E-05	r_3514	0.000113732
45	r_3515	1000	r_3515	-1000
46	r_3516	-5.69E-05	r_3516	1000
47	r_3517	1000	r_3517	-999.9981749
48	r_3518	-1000	r_3518	1000
49	r_3519	-999.9999232	r_3519	1000
50	r_3520	999.9999422	r_3520	-0.001938829
51	r_3521	0	r_3521	0
52				
53				
54				
55				
56				
57				
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59				
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1				
2	r_3522	0	r_3522	0
3	r_3523	999.999981	r_3523	-1000
4	r_3524	-1000	r_3524	1000
5	r_3525	0.000322125	r_3525	0.00011567
6	r_3526	-0.001706618	r_3526	-0.001943126
7	r_3527	-5.69E-05	r_3527	-0.000113732
8	r_3528	-1000	r_3528	-1000
9	r_3529	0.000113758	r_3529	0.000227464
10	r_3530	-0.000113758	r_3530	-0.000227464
11	r_3531	0.0009434	r_3531	0.000914697
12	r_3532	0.0009434	r_3532	0.000914697
13	r_3533	-0.0009434	r_3533	-0.000914697
14	r_3534	0.000366882	r_3534	0.000843257
15	r_3535	0	r_3535	0
16	r_3536	999.9987147	r_3536	999.9973184
17	r_3537	-2.37E-04	r_3537	0
18	r_3538	0.00044272	r_3538	0.000809947
19	r_3539	-3.79E-05	r_3539	0
20	r_3540	-0.000589344	r_3540	-0.000809947
21	r_3541	0	r_3541	0
22	r_3542	0.000184543	r_3542	0
23	r_3543	-999.9991195	r_3543	-999.9981283
24	r_3544	999.9991195	r_3544	999.9981283
25	r_3545	0.000263253	r_3545	0.000526915
26	r_3546	0.000141548	r_3546	0.000283032
27	r_3547	0.000569449	r_3547	0.001140223
28	r_3548	-0.000569449	r_3548	-0.001140223
29	r_3549	0	r_3549	0
30	r_3550	0	r_3550	0
31	r_3551	0	r_3551	0
32	r_3552	999.9997536	r_3552	999.9995073
33	r_3553	0	r_3553	0
34	r_3554	0	r_3554	-0.000109132
35	r_3555	0	r_3555	0
36	r_3556	0	r_3556	0
37	r_3557	0	r_3557	0
38	r_3558	0.00E+00	r_3558	0
39	r_3559	0	r_3559	0
40	r_3560	0	r_3560	0
41	r_3561	0	r_3561	0
42	r_3562	0	r_3562	-0.00020721
43	r_3563	-1.04E-04	r_3563	0
44	r_3564	0	r_3564	0
45	r_3565	0	r_3565	0
46	r_3566	0	r_3566	0
47	r_3567	0	r_3567	0
48	r_3568	0	r_3568	0
49	r_3569	0	r_3569	0
50	r_3570	0	r_3570	0
51	r_3571	999.9991144	r_3571	-999.9998909
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2	r_3572	-999.9999528	r_3572	1000
3	r_3573	-1000	r_3573	999.9998906
4	r_3574	1000	r_3574	-0.001938829
5	r_3575	-1000	r_3575	1000
6	r_3576	5.69E-05	r_3576	-1000
7	r_3577	-999.9991144	r_3577	1000
8	r_3578	1000	r_3578	-1000
9	r_3579	1000	r_3579	-999.9998906
10	r_3580	-999.9999422	r_3580	0.001938829
11	r_3581	5.25E-05	r_3581	0
12	r_3582	0	r_3582	0
13	r_3583	0	r_3583	0
14	r_3584	0	r_3584	0
15	r_3585	999.9990858	r_3585	999.998061
16	r_3586	-999.9990858	r_3586	-999.998061
17	r_3587	-999.9990858	r_3587	-999.998061
18	r_3588	0	r_3588	0.000109132
19	r_3589	0	r_3589	0
20	r_3590	0	r_3590	0
21	r_3591	0	r_3591	0
22	r_3592	0.00E+00	r_3592	0
23	r_3593	0	r_3593	0
24	r_3594	0	r_3594	0
25	r_3595	0	r_3595	0
26	r_3596	0	r_3596	0
27	r_3597	0	r_3597	0
28	r_3598	0	r_3598	0
29	r_3599	999.999981	r_3599	-1000
30	r_3600	-1000	r_3600	1000
31	r_3601	0	r_3601	0
32	r_3602	0	r_3602	0
33	r_3603	-0.000184543	r_3603	0
34	r_3604	0.000184543	r_3604	0
35	r_3605	0	r_3605	0
36	r_3606	0	r_3606	0
37	r_3607	0	r_3607	0
38	r_3608	0	r_3608	0
39	r_3609	0	r_3609	0
40	r_3610	0	r_3610	0
41	r_3611	0	r_3611	0
42	r_3612	0	r_3612	0
43	r_3613	0	r_3613	0
44	r_3614	0	r_3614	0
45	r_3615	0	r_3615	0
46	r_3616	0	r_3616	0
47	r_3617	0	r_3617	0
48	r_3618	0	r_3618	0
49	r_3619	0	r_3619	0
50	r_3620	0	r_3620	0
51	r_3621	0	r_3621	0
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3	r_3623	0	r_3623	0
4	r_3624	0	r_3624	0
5	r_3625	0	r_3625	0
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8	r_3628	0	r_3628	0
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16	r_3636	0	r_3636	0
17	r_3637	0	r_3637	0
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22	r_3642	0	r_3642	0
23	r_3643	0	r_3643	0
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27	r_3647	0	r_3647	0
28	r_3648	0	r_3648	0
29	r_3649	0	r_3649	0
30	r_3650	0.000237062	r_3650	0
31	r_3651	0	r_3651	0
32	r_3652	0	r_3652	0
33	r_3653	-0.000237062	r_3653	0
34	r_3654	0	r_3654	0
35	r_3655	0	r_3655	0
36	r_3656	0	r_3656	0
37	r_3657	0	r_3657	0
38	r_3658	0	r_3658	0
39	r_3659	0	r_3659	0
40	r_3660	0	r_3660	0
41	r_3661	0	r_3661	0
42	r_3662	0	r_3662	3.33E-05
43	r_3663	0	r_3663	-3.33E-05
44	r_3664	0.00E+00	r_3664	0
45	r_3665	0.00E+00	r_3665	0
46	r_3666	0	r_3666	0
47	r_3667	0	r_3667	0
48	r_3668	0	r_3668	0
49	r_3669	0	r_3669	-0.000474544
50	r_3670	0	r_3670	0
51	r_3671	0	r_3671	0
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3	r_3673	0	r_3673	0
4	r_3674	0	r_3674	0
5	r_3675	0	r_3675	0
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7	r_3677	0	r_3677	0
8	r_3678	0	r_3678	0
9	r_3679	0	r_3679	0
10	r_3680	0	r_3680	0
11	r_3681	1000	r_3681	-1000
12	r_3682	-5.69E-05	r_3682	1000
13	r_3683	999.999981	r_3683	-1000
14	r_3684	-1000	r_3684	1000
15	r_3685	0	r_3685	-0.000109132
16	r_3686	0	r_3686	0
17	r_3687	0	r_3687	0
18	r_3688	0	r_3688	0
19	r_3689	0	r_3689	0
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22	r_3692	0	r_3692	0
23	r_3693	0	r_3693	0
24	r_3694	0	r_3694	0
25	r_3695	0	r_3695	0
26	r_3696	0	r_3696	0
27	r_3697	0	r_3697	0
28	r_3698	0	r_3698	0
29	r_3699	0	r_3699	0
30	r_3700	0	r_3700	0
31	r_3701	0	r_3701	0
32	r_3702	0	r_3702	0
33	r_3703	0	r_3703	0
34	r_3704	0.00E+00	r_3704	0
35	r_3705	0	r_3705	0
36	r_3706	0	r_3706	0
37	r_3707	0	r_3707	0
38	r_3708	0	r_3708	0
39	r_3709	0	r_3709	0
40	r_3710	0	r_3710	0
41	r_3711	0	r_3711	0
42	r_3712	0	r_3712	0
43	r_3713	0	r_3713	0
44	r_3714	0	r_3714	0
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47	r_3717	0	r_3717	0
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51	r_3721	0	r_3721	0
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22	r_3742	0	r_3742	0
23	r_3743	0	r_3743	0
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25	r_3745	0	r_3745	0
26	r_3746	0	r_3746	0
27	r_3747	0	r_3747	0
28	r_3748	0	r_3748	0
29	r_3749	0	r_3749	0
30	r_3750	0	r_3750	0
31	r_3751	0	r_3751	0
32	r_3752	0	r_3752	0
33	r_3753	0	r_3753	0
34	r_3754	0	r_3754	0
35	r_3755	0.00E+00	r_3755	0
36	r_3756	4.72E-05	r_3756	0
37	r_3757	0	r_3757	0
38	r_3758	5.27E-06	r_3758	0
39	r_3759	0	r_3759	0
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41	r_3761	0	r_3761	0
42	r_3762	0	r_3762	0
43	r_3763	0	r_3763	0
44	r_3764	0	r_3764	0
45	r_3765	0	r_3765	0.000474544
46	r_3766	0	r_3766	0
47	r_3767	0.00E+00	r_3767	0
48	r_3768	0	r_3768	0
49	r_3769	0.00E+00	r_3769	0
50	r_3770	0	r_3770	0
51	r_3771	0	r_3771	0
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3	r_3773	0	r_3773	0.000474544
4	r_3774	0	r_3774	0
5	r_3775	0.00E+00	r_3775	0
6	r_3776	0	r_3776	0
7	r_3777	0.00E+00	r_3777	0
8	r_3778	0	r_3778	0
9	r_3779	0	r_3779	0
10	r_3780	0	r_3780	0
11	r_3781	-1000	r_3781	0
12	r_3782	1.00E+03	r_3782	1000
13	r_3783	-1.00E+03	r_3783	0
14	r_3784	1000	r_3784	-1000
15	r_3785	1000	r_3785	0
16	r_3786	-1.00E+03	r_3786	-1000
17	r_3787	1.00E+03	r_3787	0
18	r_3788	-1000	r_3788	1000
19	r_3789	0	r_3789	-0.000109132
20	r_3790	0	r_3790	0
21	r_3791	0	r_3791	0
22	r_3792	0	r_3792	0
23	r_3793	0.00E+00	r_3793	0
24	r_3794	0	r_3794	0
25	r_3795	-3.79E-05	r_3795	0
26	r_3796	0	r_3796	0
27	r_3797	0	r_3797	3.33E-05
28	r_3798	0	r_3798	0
29	r_3799	0	r_3799	0
30	r_3800	0	r_3800	0
31	r_3801	0	r_3801	0
32	r_3802	0	r_3802	0
33	r_3803	0	r_3803	0
34	r_3804	0	r_3804	0
35	r_3805	0	r_3805	7.58E-05
36	r_3806	0	r_3806	0
37	r_3807	0	r_3807	0
38	r_3808	0	r_3808	0
39	r_3809	0.00E+00	r_3809	0
40	r_3810	0	r_3810	0
41	r_3811	3.79E-05	r_3811	0
42	r_3812	0	r_3812	0
43	r_3813	0	r_3813	0
44	r_3814	0.00E+00	r_3814	0
45	r_3815	0	r_3815	0
46	r_3816	0	r_3816	0
47	r_3817	0	r_3817	0
48	r_3818	0	r_3818	0
49	r_3819	0	r_3819	0
50	r_3820	0	r_3820	0
51	r_3821	0	r_3821	0
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3	r_3823	0	r_3823	0
4	r_3824	0	r_3824	0
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8	r_3828	0	r_3828	0
9	r_3829	0	r_3829	0
10	r_3830	0	r_3830	0
11	r_3831	0	r_3831	0
12	r_3832	0	r_3832	0
13	r_3833	0	r_3833	0
14	r_3834	0	r_3834	0
15	r_3835	0	r_3835	0
16	r_3836	0	r_3836	0
17	r_3837	0	r_3837	0
18	r_3838	0	r_3838	0
19	r_3839	0	r_3839	0
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22	r_3842	0	r_3842	0
23	r_3843	0	r_3843	0
24	r_3844	0	r_3844	0
25	r_3845	0	r_3845	0
26	r_3846	0	r_3846	0
27	r_3847	0	r_3847	0
28	r_3848	0	r_3848	0
29	r_3849	0	r_3849	0
30	r_3850	4.72E-05	r_3850	0
31	r_3851	0	r_3851	0
32	r_3852	0.000189816	r_3852	0
33	r_3853	0	r_3853	0
34	r_3854	0	r_3854	0
35	r_3855	0	r_3855	0
36	r_3856	0	r_3856	0
37	r_3857	0	r_3857	0
38	r_3858	4.72E-05	r_3858	0
39	r_3859	0	r_3859	0
40	r_3860	0.000189816	r_3860	0
41	r_3861	0	r_3861	0
42	r_3862	0	r_3862	0
43	r_3863	0	r_3863	0
44	r_3864	0	r_3864	0
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46	r_3866	0	r_3866	0
47	r_3867	0	r_3867	0
48	r_3868	0	r_3868	0
49	r_3869	0	r_3869	0
50	r_3870	0	r_3870	0
51	r_3871	0	r_3871	0
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4	r_3874	0	r_3874	0
5	r_3875	0	r_3875	0
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9	r_3879	0	r_3879	0
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11	r_3881	0	r_3881	0
12	r_3882	0	r_3882	0
13	r_3883	0	r_3883	0
14	r_3884	0.000184543	r_3884	0
15	r_3885	0	r_3885	0
16	r_3886	0	r_3886	0
17	r_3887	0	r_3887	0
18	r_3888	0	r_3888	0
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23	r_3893	0	r_3893	0
24	r_3894	0	r_3894	0
25	r_3895	0	r_3895	0
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37	r_3907	0	r_3907	0
38	r_3908	0	r_3908	0
39	r_3909	0	r_3909	0
40	r_3910	0.000184543	r_3910	0
41	r_3911	0	r_3911	0
42	r_3912	0	r_3912	0
43	r_3913	0	r_3913	0
44	r_3914	0	r_3914	0
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46	r_3916	0	r_3916	0
47	r_3917	0	r_3917	0
48	r_3918	0	r_3918	0
49	r_3919	0	r_3919	0
50	r_3920	0	r_3920	0
51	r_3921	0	r_3921	0
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3	r_3923	0	r_3923	0
4	r_3924	0	r_3924	0
5	r_3925	0	r_3925	0
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9	r_3929	0	r_3929	0
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11	r_3931	0	r_3931	0
12	r_3932	0	r_3932	0
13	r_3933	0	r_3933	0
14	r_3934	0	r_3934	0
15	r_3935	0	r_3935	0
16	r_3936	0	r_3936	0
17	r_3937	1.90E-05	r_3937	3.79E-05
18	r_3938	0	r_3938	0
19	r_3939	-999.9997162	r_3939	-999.9994359
20	r_3940	0	r_3940	0
21	r_3941	0	r_3941	0
22	r_3942	0	r_3942	0
23	r_3943	0	r_3943	0
24	r_3944	0	r_3944	0
25	r_3945	0	r_3945	0
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27	r_3947	0	r_3947	0
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35	r_3955	0	r_3955	0
36	r_3956	0	r_3956	0
37	r_3957	0	r_3957	0.000474544
38	r_3958	0	r_3958	0
39	r_3959	0	r_3959	0
40	r_3960	0	r_3960	0
41	r_3961	0	r_3961	0
42	r_3962	0	r_3962	0
43	r_3973	3.57E-05	r_3973	7.14E-05
44	r_3987	1.72E-05	r_3987	3.43E-05
45	r_3996	0.00012672	r_3996	0.000253383
46	r_4005	3.07E-05	r_4005	6.13E-05
47	r_4038	3.44E-05	r_4038	6.87E-05
48	r_4040	4.40E-08	r_4040	8.80E-08
49	r_4043	0	r_4043	0
50	r_4044	0	r_4044	0
51	r_4041	0.044	r_4041	0.087980181
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**enzymes associated
fluxes (flux
101*flux)**

Date

Aspect

P-value cutoff
Calculate FDR
Regulation links followed
Bonferroni correction
Annotation file
Evidence codes used

Gene Ontology term

small molecule metabolic process
organophosphate metabolic process
nucleotide metabolic process
nucleoside phosphate metabolic process
nucleobase-containing small molecule metabolic process
ribose phosphate metabolic process
phosphorus metabolic process
ribonucleoside triphosphate metabolic process
purine nucleoside triphosphate metabolic process
purine nucleotide metabolic process
nucleoside triphosphate metabolic process
ATP metabolic process
purine ribonucleoside triphosphate metabolic process
phosphate-containing compound metabolic process
purine-containing compound metabolic process
purine nucleoside monophosphate metabolic process
purine ribonucleoside monophosphate metabolic process
purine ribonucleotide metabolic process
ribonucleotide metabolic process
carbohydrate derivative metabolic process
nucleoside monophosphate metabolic process
drug metabolic process
ribonucleoside monophosphate metabolic process
organophosphate biosynthetic process
oxidation-reduction process
generation of precursor metabolites and energy
oxidative phosphorylation
ATP synthesis coupled electron transport
mitochondrial ATP synthesis coupled electron transport
organic acid metabolic process
respiratory electron transport chain
ribonucleoside triphosphate biosynthetic process
carboxylic acid metabolic process
oxoacid metabolic process
coenzyme metabolic process

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2	YDR454C	nucleoside triphosphate biosynthetic process
3	YDR502C	small molecule biosynthetic process
4	YDR503C	cellular respiration
5	YDR529C	electron transport chain
6	YDR536W	energy derivation by oxidation of organic compounds
7	YEL024W	nucleotide biosynthetic process
8	YEL039C	purine nucleoside triphosphate biosynthetic process
9	YER005W	purine ribonucleoside triphosphate biosynthetic process
10	YER026C	ATP biosynthetic process
11	YER043C	nucleoside phosphate biosynthetic process
12	YER053C	cofactor metabolic process
13	YER070W	cellular lipid metabolic process
14	YER081W	aerobic respiration
15	YER170W	cellular metabolic process
16	YFL018C	purine nucleotide biosynthetic process
17	YFR033C	purine-containing compound biosynthetic process
18	YGL001C	lipid biosynthetic process
19	YGL012W	lipid metabolic process
20	YGL055W	purine nucleoside monophosphate biosynthetic process
21	YGL062W	purine ribonucleoside monophosphate biosynthetic process
22	YGL080W	ribose phosphate biosynthetic process
23	YGL084C	ribonucleotide biosynthetic process
24	YGL187C	purine ribonucleotide biosynthetic process
25	YGL191W	primary metabolic process
26	YGL202W	metabolic process
27	YGR060W	nucleoside monophosphate biosynthetic process
28	YGR087C	organic substance metabolic process
29	YGR157W	pyridine nucleotide metabolic process
30	YGR170W	nicotinamide nucleotide metabolic process
31	YGR175C	ribonucleoside monophosphate biosynthetic process
32	YGR180C	alcohol metabolic process
33	YGR183C	proton transmembrane transport
34	YGR192C	pyridine-containing compound metabolic process
35	YGR202C	ion transmembrane transport
36	YGR204W	oxidoreduction coenzyme metabolic process
37	YGR208W	energy coupled proton transport, down electrochemical gradient
38	YGR209C	ATP synthesis coupled proton transport
39	YGR240C	organic hydroxy compound metabolic process
40	YGR243W	carbohydrate derivative biosynthetic process
41	YGR248W	monovalent inorganic cation transport
42	YGR254W	monocarboxylic acid metabolic process
43	YGR256W	ion transport
44	YHR001W-A	phospholipid metabolic process
45	YHR002W	phosphorylation
46	YHR007C	pyruvate metabolic process
47	YHR042W	ergosterol metabolic process
48	YHR051W	phytosteroid metabolic process
49	YHR072W	secondary alcohol metabolic process
50	YHR123W	phospholipid biosynthetic process
51	YHR137W	transmembrane transport
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2	YHR144C	inorganic cation transmembrane transport
3	YHR162W	cellular alcohol metabolic process
4	YHR163W	cation transmembrane transport
5	YHR174W	cation transport
6	YHR183W	inorganic ion transmembrane transport
7	YHR190W	sterol metabolic process
8	YHR208W	sterol biosynthetic process
9	YIL066C	steroid metabolic process
10	YIL074C	ergosterol biosynthetic process
11	YIL111W	phytosteroid biosynthetic process
12	YIL125W	cellular alcohol biosynthetic process
13	YJL026W	cellular lipid biosynthetic process
14	YJL045W	organic hydroxy compound biosynthetic process
15	YJL052W	nucleoside diphosphate metabolic process
16	YJL121C	steroid biosynthetic process
17	YJL166W	alcohol biosynthetic process
18	YJL167W	secondary alcohol biosynthetic process
19	YJR001W	organonitrogen compound metabolic process
20	YJR009C	purine nucleoside diphosphate metabolic process
21	YJR048W	purine ribonucleoside diphosphate metabolic process
22	YJR073C	ribonucleoside diphosphate metabolic process
23	YJR077C	mitochondrial electron transport, ubiquinol to cytochrome c
24	YJR095W	mitochondrial electron transport, cytochrome c to oxygen
25	YJR103W	carbohydrate metabolic process
26	YJR105W	ADP metabolic process
27	YJR121W	organic cyclic compound metabolic process
28	YJR148W	aerobic electron transport chain
29	YKL004W	glyceraldehyde-3-phosphate metabolic process
30	YKL016C	organic acid biosynthetic process
31	YKL035W	carboxylic acid biosynthetic process
32	YKL060C	cellular process
33	YKL067W	nucleobase-containing small molecule biosynthetic process
34	YKL085W	pentose-phosphate shunt
35	YKL106W	ATP hydrolysis coupled cation transmembrane transport
36	YKL141W	glycerolipid biosynthetic process
37	YKL146W	biosynthetic process
38	YKL148C	nucleotide catabolic process
39	YKL152C	nucleoside phosphate catabolic process
40	YKL182W	organophosphate catabolic process
41	YKR031C	glycerolipid metabolic process
42	YKR043C	organic substance biosynthetic process
43	YKR067W	NADP metabolic process
44	YKR080W	nucleoside diphosphate phosphorylation
45	YKR089C	nucleotide phosphorylation
46	YLL041C	acyl-CoA metabolic process
47	YLL043W	thioester metabolic process
48	YLL052C	glycolytic process
49	YLR027C	ATP generation from ADP
50	YLR038C	pyruvate biosynthetic process
51	YLR044C	alpha-amino acid metabolic process
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2	YLR058C	glucose 6-phosphate metabolic process
3	YLR089C	glycerophospholipid biosynthetic process
4	YLR100W	monocarboxylic acid biosynthetic process
5	YLR133W	glucose metabolic process
6	YLR134W	cellular biosynthetic process
7	YLR153C	monosaccharide metabolic process
8	YLR180W	acetyl-CoA metabolic process
9	YLR295C	gluconeogenesis
10	YLR304C	hexose biosynthetic process
11	YLR354C	one-carbon metabolic process
12	YLR395C	glycerophospholipid metabolic process
13	YLR410W	monosaccharide biosynthetic process
14	YLR450W	cofactor biosynthetic process
15	YML075C	small molecule catabolic process
16	YML081C-A	hexose metabolic process
17	YML120C	nicotinamide nucleotide biosynthetic process
18	YML126C	pyridine nucleotide biosynthetic process
19	YMR056C	isoprenoid biosynthetic process
20	YMR145C	pyridine-containing compound biosynthetic process
21	YMR165C	tricarboxylic acid cycle
22	YMR189W	citrate metabolic process
23	YMR205C	coenzyme biosynthetic process
24	YMR208W	carboxylic acid catabolic process
25	YMR220W	tricarboxylic acid metabolic process
26	YMR246W	organic acid catabolic process
27	YMR256C	phosphatidylcholine biosynthetic process
28	YMR267W	cellular amino acid metabolic process
29	YNL052W	sulfur compound metabolic process
30	YNL101W	cellular aromatic compound metabolic process
31	YNL130C	organic cyclic compound biosynthetic process
32	YNL169C	isoprenoid metabolic process
33	YNL241C	phosphatidylcholine metabolic process
34	YNL280C	cellular amino acid catabolic process
35	YNR008W	terpenoid metabolic process
36	YNR016C	farnesyl diphosphate metabolic process
37	YNR019W	cellular aldehyde metabolic process
38	YNR043W	dicarboxylic acid metabolic process
39	YOL059W	heterocycle metabolic process
40	YOL126C	L-serine metabolic process
41	YOR065W	deoxyribonucleotide metabolic process
42	YOR081C	deoxyribonucleotide biosynthetic process
43	YOR095C	long-chain fatty acid metabolic process
44	YOR163W	glycine metabolic process
45	YOR175C	alpha-amino acid catabolic process
46	YOR184W	nucleobase-containing compound metabolic process
47	YOR245C	L-serine biosynthetic process
48	YOR311C	isopentenyl diphosphate biosynthetic process
49	YOR317W	isopentenyl diphosphate metabolic process
50	YOR347C	serine family amino acid metabolic process
51	YOR375C	carbohydrate catabolic process
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YOR388C	organonitrogen compound biosynthetic process
YPL028W	terpenoid biosynthetic process
YPL061W	farnesyl diphosphate biosynthetic process
YPL078C	mitochondrial transport
YPL117C	ammonium ion metabolic process
YPL189W	branched-chain amino acid catabolic process
YPL231W	phosphatidylethanolamine biosynthetic process
YPL262W	pentose-phosphate shunt, oxidative branch
YPL271W	drug catabolic process
YPR020W	glycine catabolic process
YPR021C	isopentenyl diphosphate biosynthetic process, mevalonate pathwa
YPR074C	long-chain fatty acid biosynthetic process
YPR113W	carboxylic acid transport
YPR140W	alpha-amino acid biosynthetic process
YPR191W	organic acid transport
YPR192W	anion transport
	nitrogen compound metabolic process
	cellular amino acid biosynthetic process
	organic anion transport
	carbohydrate biosynthetic process
	CDP-choline pathway
	heme transport
	CDP-diacylglycerol biosynthetic process
	CDP-diacylglycerol metabolic process
	polyol metabolic process
	aromatic compound catabolic process
	monocarboxylic acid transport
	NADH oxidation
	phosphatidylethanolamine metabolic process
	anion transmembrane transport
	acylglycerol metabolic process
	triglyceride metabolic process
	carboxylic acid transmembrane transport
	ethanol metabolic process
	neutral lipid metabolic process
	neurotransmitter metabolic process
	organic cyclic compound catabolic process
	organic acid transmembrane transport
	ADP transport
	regulation of neurotransmitter levels
	primary alcohol metabolic process

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Yes

Yes

Yes

gene_association.sgd

IEA (51113), IEP (119), IGI (5639), HDA (7284),

IBA (19185), IPI (3211), ND (3719), IC (1450),

ISS (1824), HMP (80), RCA (6), IDA (16629),

IMP (13380), TAS (467), ISM (1258), NAS (101),

HGI (16), ISO (9), ISA (299)

Cluster frequency	Genome frequency	Corrected p-value	FDR
162 of 213 genes, 76.1%	845 of 7166 genes, 11.8%	3.24E-107	0.00%
130 of 213 genes, 61.0%	445 of 7166 genes, 6.2%	1.90E-104	0.00%
95 of 213 genes, 44.6%	247 of 7166 genes, 3.4%	1.85E-84	0.00%
95 of 213 genes, 44.6%	252 of 7166 genes, 3.5%	1.86E-83	0.00%
98 of 213 genes, 46.0%	288 of 7166 genes, 4.0%	2.43E-81	0.00%
83 of 213 genes, 39.0%	183 of 7166 genes, 2.6%	9.25E-80	0.00%
141 of 213 genes, 66.2%	860 of 7166 genes, 12.0%	7.93E-78	0.00%
67 of 213 genes, 31.5%	115 of 7166 genes, 1.6%	9.64E-73	0.00%
66 of 213 genes, 31.0%	113 of 7166 genes, 1.6%	1.15E-71	0.00%
73 of 213 genes, 34.3%	152 of 7166 genes, 2.1%	1.88E-71	0.00%
68 of 213 genes, 31.9%	124 of 7166 genes, 1.7%	2.23E-71	0.00%
64 of 213 genes, 30.0%	106 of 7166 genes, 1.5%	1.17E-70	0.00%
65 of 213 genes, 30.5%	111 of 7166 genes, 1.5%	1.38E-70	0.00%
133 of 213 genes, 62.4%	828 of 7166 genes, 11.6%	1.64E-70	0.00%
75 of 213 genes, 35.2%	170 of 7166 genes, 2.4%	4.68E-70	0.00%
67 of 213 genes, 31.5%	130 of 7166 genes, 1.8%	9.79E-68	0.00%
67 of 213 genes, 31.5%	130 of 7166 genes, 1.8%	9.79E-68	0.00%
70 of 213 genes, 32.9%	148 of 7166 genes, 2.1%	1.33E-67	0.00%
72 of 213 genes, 33.8%	163 of 7166 genes, 2.3%	5.43E-67	0.00%
97 of 213 genes, 45.5%	385 of 7166 genes, 5.4%	3.91E-66	0.00%
69 of 213 genes, 32.4%	153 of 7166 genes, 2.1%	1.07E-64	0.00%
84 of 213 genes, 39.4%	279 of 7166 genes, 3.9%	6.27E-63	0.00%
67 of 213 genes, 31.5%	148 of 7166 genes, 2.1%	9.12E-63	0.00%
77 of 213 genes, 36.2%	296 of 7166 genes, 4.1%	1.44E-51	0.00%
89 of 213 genes, 41.8%	462 of 7166 genes, 6.4%	7.39E-49	0.00%
66 of 213 genes, 31.0%	230 of 7166 genes, 3.2%	2.74E-46	0.00%
30 of 213 genes, 14.1%	41 of 7166 genes, 0.6%	3.20E-35	0.00%
29 of 213 genes, 13.6%	39 of 7166 genes, 0.5%	2.56E-34	0.00%
29 of 213 genes, 13.6%	39 of 7166 genes, 0.5%	2.56E-34	0.00%
76 of 213 genes, 35.7%	478 of 7166 genes, 6.7%	3.01E-34	0.00%
31 of 213 genes, 14.6%	47 of 7166 genes, 0.7%	3.45E-34	0.00%
35 of 213 genes, 16.4%	66 of 7166 genes, 0.9%	4.19E-34	0.00%
74 of 213 genes, 34.7%	458 of 7166 genes, 6.4%	1.15E-33	0.00%
75 of 213 genes, 35.2%	476 of 7166 genes, 6.6%	2.00E-33	0.00%
52 of 213 genes, 24.4%	200 of 7166 genes, 2.8%	4.92E-33	0.00%

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2	35 of 213 genes, 16.4%	70 of 7166 genes, 1.0%	6.66E-33	0.00%
3	69 of 213 genes, 32.4%	401 of 7166 genes, 5.6%	8.49E-33	0.00%
4	42 of 213 genes, 19.7%	116 of 7166 genes, 1.6%	9.45E-33	0.00%
5	35 of 213 genes, 16.4%	72 of 7166 genes, 1.0%	2.43E-32	0.00%
6	48 of 213 genes, 22.5%	169 of 7166 genes, 2.4%	3.41E-32	0.00%
7	46 of 213 genes, 21.6%	152 of 7166 genes, 2.1%	4.22E-32	0.00%
8	33 of 213 genes, 15.5%	62 of 7166 genes, 0.9%	4.42E-32	0.00%
9	33 of 213 genes, 15.5%	62 of 7166 genes, 0.9%	4.42E-32	0.00%
10	32 of 213 genes, 15.0%	57 of 7166 genes, 0.8%	4.65E-32	0.00%
11	46 of 213 genes, 21.6%	155 of 7166 genes, 2.2%	1.14E-31	0.00%
12	57 of 213 genes, 26.8%	271 of 7166 genes, 3.8%	3.74E-31	0.00%
13	61 of 213 genes, 28.6%	326 of 7166 genes, 4.5%	1.46E-30	0.00%
14	37 of 213 genes, 17.4%	92 of 7166 genes, 1.3%	1.61E-30	0.00%
15	198 of 213 genes, 93.0%	4102 of 7166 genes, 57.2%	1.71E-29	0.00%
16	37 of 213 genes, 17.4%	98 of 7166 genes, 1.4%	2.64E-29	0.00%
17	38 of 213 genes, 17.8%	106 of 7166 genes, 1.5%	3.63E-29	0.00%
18	50 of 213 genes, 23.5%	215 of 7166 genes, 3.0%	4.50E-29	0.00%
19	61 of 213 genes, 28.6%	352 of 7166 genes, 4.9%	1.42E-28	0.00%
20	33 of 213 genes, 15.5%	79 of 7166 genes, 1.1%	1.32E-27	0.00%
21	33 of 213 genes, 15.5%	79 of 7166 genes, 1.1%	1.32E-27	0.00%
22	38 of 213 genes, 17.8%	116 of 7166 genes, 1.6%	1.84E-27	0.00%
23	37 of 213 genes, 17.4%	110 of 7166 genes, 1.5%	3.77E-27	0.00%
24	35 of 213 genes, 16.4%	95 of 7166 genes, 1.3%	3.84E-27	0.00%
25	190 of 213 genes, 89.2%	3894 of 7166 genes, 54.3%	4.58E-26	0.00%
26	198 of 213 genes, 93.0%	4286 of 7166 genes, 59.8%	4.99E-26	0.00%
27	35 of 213 genes, 16.4%	102 of 7166 genes, 1.4%	6.86E-26	0.00%
28	192 of 213 genes, 90.1%	4049 of 7166 genes, 56.5%	6.38E-25	0.00%
29	32 of 213 genes, 15.0%	88 of 7166 genes, 1.2%	2.13E-24	0.00%
30	32 of 213 genes, 15.0%	88 of 7166 genes, 1.2%	2.13E-24	0.00%
31	33 of 213 genes, 15.5%	97 of 7166 genes, 1.4%	3.93E-24	0.00%
32	33 of 213 genes, 15.5%	100 of 7166 genes, 1.4%	1.23E-23	0.00%
33	32 of 213 genes, 15.0%	97 of 7166 genes, 1.4%	7.63E-23	0.00%
34	32 of 213 genes, 15.0%	100 of 7166 genes, 1.4%	2.28E-22	0.00%
35	48 of 213 genes, 22.5%	271 of 7166 genes, 3.8%	4.26E-22	0.00%
36	32 of 213 genes, 15.0%	103 of 7166 genes, 1.4%	6.55E-22	0.00%
37	18 of 213 genes, 8.5%	22 of 7166 genes, 0.3%	7.25E-22	0.00%
38	18 of 213 genes, 8.5%	22 of 7166 genes, 0.3%	7.25E-22	0.00%
39	36 of 213 genes, 16.9%	143 of 7166 genes, 2.0%	2.12E-21	0.00%
40	47 of 213 genes, 22.1%	278 of 7166 genes, 3.9%	1.17E-20	0.00%
41	32 of 213 genes, 15.0%	112 of 7166 genes, 1.6%	1.23E-20	0.00%
42	40 of 213 genes, 18.8%	201 of 7166 genes, 2.8%	6.69E-20	0.00%
43	54 of 213 genes, 25.4%	400 of 7166 genes, 5.6%	2.40E-19	0.00%
44	36 of 213 genes, 16.9%	164 of 7166 genes, 2.3%	3.43E-19	0.00%
45	54 of 213 genes, 25.4%	404 of 7166 genes, 5.6%	3.89E-19	0.00%
46	23 of 213 genes, 10.8%	54 of 7166 genes, 0.8%	7.70E-19	0.00%
47	19 of 213 genes, 8.9%	33 of 7166 genes, 0.5%	1.70E-18	0.00%
48	19 of 213 genes, 8.9%	33 of 7166 genes, 0.5%	1.70E-18	0.00%
49	19 of 213 genes, 8.9%	34 of 7166 genes, 0.5%	3.76E-18	0.00%
50	30 of 213 genes, 14.1%	117 of 7166 genes, 1.6%	1.05E-17	0.00%
51	56 of 213 genes, 26.3%	468 of 7166 genes, 6.5%	1.34E-17	0.00%
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2	33 of 213 genes, 15.5%	149 of 7166 genes, 2.1%	1.58E-17	0.00%
3	19 of 213 genes, 8.9%	36 of 7166 genes, 0.5%	1.65E-17	0.00%
4	36 of 213 genes, 16.9%	189 of 7166 genes, 2.6%	5.49E-17	0.00%
5	39 of 213 genes, 18.3%	230 of 7166 genes, 3.2%	1.03E-16	0.00%
6	34 of 213 genes, 16.0%	169 of 7166 genes, 2.4%	1.04E-16	0.00%
7	21 of 213 genes, 9.9%	52 of 7166 genes, 0.7%	1.88E-16	0.00%
8	19 of 213 genes, 8.9%	40 of 7166 genes, 0.6%	2.27E-16	0.00%
9	21 of 213 genes, 9.9%	53 of 7166 genes, 0.7%	3.04E-16	0.00%
10	17 of 213 genes, 8.0%	30 of 7166 genes, 0.4%	3.41E-16	0.00%
11	17 of 213 genes, 8.0%	30 of 7166 genes, 0.4%	3.41E-16	0.00%
12	17 of 213 genes, 8.0%	30 of 7166 genes, 0.4%	3.41E-16	0.00%
13	17 of 213 genes, 8.0%	30 of 7166 genes, 0.4%	3.41E-16	0.00%
14	17 of 213 genes, 8.0%	30 of 7166 genes, 0.4%	3.41E-16	0.00%
15	25 of 213 genes, 11.7%	84 of 7166 genes, 1.2%	3.76E-16	0.00%
16	20 of 213 genes, 9.4%	47 of 7166 genes, 0.7%	3.93E-16	0.00%
17	19 of 213 genes, 8.9%	41 of 7166 genes, 0.6%	4.13E-16	0.00%
18	22 of 213 genes, 10.3%	62 of 7166 genes, 0.9%	7.19E-16	0.00%
19	17 of 213 genes, 8.0%	31 of 7166 genes, 0.4%	7.37E-16	0.00%
20	135 of 213 genes, 63.4%	2470 of 7166 genes, 34.5%	1.66E-15	0.00%
21	19 of 213 genes, 8.9%	44 of 7166 genes, 0.6%	2.20E-15	0.00%
22	19 of 213 genes, 8.9%	44 of 7166 genes, 0.6%	2.20E-15	0.00%
23	19 of 213 genes, 8.9%	44 of 7166 genes, 0.6%	2.20E-15	0.00%
24	19 of 213 genes, 8.9%	44 of 7166 genes, 0.6%	2.20E-15	0.00%
25	12 of 213 genes, 5.6%	13 of 7166 genes, 0.2%	3.04E-15	0.00%
26	13 of 213 genes, 6.1%	17 of 7166 genes, 0.2%	1.44E-14	0.00%
27	41 of 213 genes, 19.2%	299 of 7166 genes, 4.2%	3.23E-14	0.00%
28	18 of 213 genes, 8.5%	43 of 7166 genes, 0.6%	3.47E-14	0.00%
29	124 of 213 genes, 58.2%	2221 of 7166 genes, 31.0%	4.99E-14	0.00%
30	13 of 213 genes, 6.1%	18 of 7166 genes, 0.3%	5.08E-14	0.00%
31	13 of 213 genes, 6.1%	18 of 7166 genes, 0.3%	5.08E-14	0.00%
32	36 of 213 genes, 16.9%	235 of 7166 genes, 3.3%	9.26E-14	0.00%
33	36 of 213 genes, 16.9%	235 of 7166 genes, 3.3%	9.26E-14	0.00%
34	201 of 213 genes, 94.4%	5203 of 7166 genes, 72.6%	1.01E-13	0.00%
35	21 of 213 genes, 9.9%	75 of 7166 genes, 1.0%	1.13E-12	0.00%
36	12 of 213 genes, 5.6%	17 of 7166 genes, 0.2%	1.30E-12	0.00%
37	16 of 213 genes, 7.5%	38 of 7166 genes, 0.5%	1.81E-12	0.00%
38	22 of 213 genes, 10.3%	87 of 7166 genes, 1.2%	2.48E-12	0.00%
39	130 of 213 genes, 61.0%	2512 of 7166 genes, 35.1%	2.83E-12	0.00%
40	16 of 213 genes, 7.5%	41 of 7166 genes, 0.6%	7.78E-12	0.00%
41	16 of 213 genes, 7.5%	42 of 7166 genes, 0.6%	1.22E-11	0.00%
42	18 of 213 genes, 8.5%	57 of 7166 genes, 0.8%	1.22E-11	0.00%
43	26 of 213 genes, 12.2%	138 of 7166 genes, 1.9%	1.43E-11	0.00%
44	128 of 213 genes, 60.1%	2501 of 7166 genes, 34.9%	1.70E-11	0.00%
45	13 of 213 genes, 6.1%	25 of 7166 genes, 0.3%	2.56E-11	0.00%
46	15 of 213 genes, 7.0%	37 of 7166 genes, 0.5%	2.76E-11	0.00%
47	16 of 213 genes, 7.5%	44 of 7166 genes, 0.6%	2.90E-11	0.00%
48	12 of 213 genes, 5.6%	23 of 7166 genes, 0.3%	2.43E-10	0.00%
49	12 of 213 genes, 5.6%	23 of 7166 genes, 0.3%	2.43E-10	0.00%
50	14 of 213 genes, 6.6%	35 of 7166 genes, 0.5%	2.52E-10	0.00%
51	14 of 213 genes, 6.6%	35 of 7166 genes, 0.5%	2.52E-10	0.00%
52	14 of 213 genes, 6.6%	35 of 7166 genes, 0.5%	2.52E-10	0.00%
53	29 of 213 genes, 13.6%	199 of 7166 genes, 2.8%	4.20E-10	0.00%
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2	12 of 213 genes, 5.6%	24 of 7166 genes, 0.3%	4.75E-10	0.00%
3	19 of 213 genes, 8.9%	81 of 7166 genes, 1.1%	8.97E-10	0.00%
4	20 of 213 genes, 9.4%	94 of 7166 genes, 1.3%	1.59E-09	0.00%
5	18 of 213 genes, 8.5%	74 of 7166 genes, 1.0%	1.84E-09	0.00%
6	121 of 213 genes, 56.8%	2469 of 7166 genes, 34.5%	7.38E-09	0.00%
7	20 of 213 genes, 9.4%	102 of 7166 genes, 1.4%	7.95E-09	0.00%
8	9 of 213 genes, 4.2%	14 of 7166 genes, 0.2%	1.85E-08	0.00%
9	13 of 213 genes, 6.1%	38 of 7166 genes, 0.5%	1.89E-08	0.00%
10	13 of 213 genes, 6.1%	38 of 7166 genes, 0.5%	1.89E-08	0.00%
11	10 of 213 genes, 4.7%	19 of 7166 genes, 0.3%	2.19E-08	0.00%
12	21 of 213 genes, 9.9%	123 of 7166 genes, 1.7%	3.80E-08	0.00%
13	13 of 213 genes, 6.1%	40 of 7166 genes, 0.6%	4.00E-08	0.00%
14	24 of 213 genes, 11.3%	164 of 7166 genes, 2.3%	4.41E-08	0.00%
15	23 of 213 genes, 10.8%	154 of 7166 genes, 2.1%	7.43E-08	0.00%
16	18 of 213 genes, 8.5%	91 of 7166 genes, 1.3%	7.66E-08	0.00%
17	14 of 213 genes, 6.6%	52 of 7166 genes, 0.7%	1.23E-07	0.00%
18	14 of 213 genes, 6.6%	53 of 7166 genes, 0.7%	1.62E-07	0.00%
19	9 of 213 genes, 4.2%	17 of 7166 genes, 0.2%	2.08E-07	0.00%
20	15 of 213 genes, 7.0%	65 of 7166 genes, 0.9%	2.92E-07	0.00%
21	11 of 213 genes, 5.2%	31 of 7166 genes, 0.4%	4.27E-07	0.00%
22	11 of 213 genes, 5.2%	31 of 7166 genes, 0.4%	4.27E-07	0.00%
23	21 of 213 genes, 9.9%	140 of 7166 genes, 2.0%	4.66E-07	0.00%
24	18 of 213 genes, 8.5%	102 of 7166 genes, 1.4%	5.50E-07	0.00%
25	11 of 213 genes, 5.2%	32 of 7166 genes, 0.4%	6.34E-07	0.00%
26	18 of 213 genes, 8.5%	103 of 7166 genes, 1.4%	6.49E-07	0.00%
27	9 of 213 genes, 4.2%	19 of 7166 genes, 0.3%	7.51E-07	0.00%
28	29 of 213 genes, 13.6%	269 of 7166 genes, 3.8%	7.71E-07	0.00%
29	21 of 213 genes, 9.9%	147 of 7166 genes, 2.1%	1.16E-06	0.00%
30	105 of 213 genes, 49.3%	2152 of 7166 genes, 30.0%	1.18E-06	0.00%
31	71 of 213 genes, 33.3%	1204 of 7166 genes, 16.8%	1.19E-06	0.00%
32	9 of 213 genes, 4.2%	20 of 7166 genes, 0.3%	1.33E-06	0.00%
33	9 of 213 genes, 4.2%	21 of 7166 genes, 0.3%	2.27E-06	0.00%
34	14 of 213 genes, 6.6%	65 of 7166 genes, 0.9%	3.01E-06	0.00%
35	6 of 213 genes, 2.8%	7 of 7166 genes, 0.1%	3.02E-06	0.00%
36	6 of 213 genes, 2.8%	7 of 7166 genes, 0.1%	3.02E-06	0.00%
37	13 of 213 genes, 6.1%	58 of 7166 genes, 0.8%	6.53E-06	0.00%
38	13 of 213 genes, 6.1%	58 of 7166 genes, 0.8%	6.53E-06	0.00%
39	103 of 213 genes, 48.4%	2160 of 7166 genes, 30.1%	7.91E-06	0.00%
40	7 of 213 genes, 3.3%	12 of 7166 genes, 0.2%	8.92E-06	0.00%
41	7 of 213 genes, 3.3%	12 of 7166 genes, 0.2%	8.92E-06	0.00%
42	7 of 213 genes, 3.3%	12 of 7166 genes, 0.2%	8.92E-06	0.00%
43	6 of 213 genes, 2.8%	8 of 7166 genes, 0.1%	1.17E-05	0.00%
44	6 of 213 genes, 2.8%	8 of 7166 genes, 0.1%	1.17E-05	0.00%
45	12 of 213 genes, 5.6%	51 of 7166 genes, 0.7%	1.37E-05	0.00%
46	99 of 213 genes, 46.5%	2061 of 7166 genes, 28.8%	1.38E-05	0.00%
47	5 of 213 genes, 2.3%	5 of 7166 genes, 0.1%	1.52E-05	0.00%
48	5 of 213 genes, 2.3%	5 of 7166 genes, 0.1%	1.52E-05	0.00%
49	5 of 213 genes, 2.3%	5 of 7166 genes, 0.1%	1.52E-05	0.00%
50	11 of 213 genes, 5.2%	42 of 7166 genes, 0.6%	1.62E-05	0.00%
51	16 of 213 genes, 7.5%	102 of 7166 genes, 1.4%	2.87E-05	0.00%
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2	72 of 213 genes, 33.8%	1350 of 7166 genes, 18.8%	6.95E-05	0.00%
3	5 of 213 genes, 2.3%	6 of 7166 genes, 0.1%	8.92E-05	0.00%
4	5 of 213 genes, 2.3%	6 of 7166 genes, 0.1%	8.92E-05	0.00%
5	16 of 213 genes, 7.5%	111 of 7166 genes, 1.5%	9.76E-05	0.00%
6	9 of 213 genes, 4.2%	32 of 7166 genes, 0.4%	0.00016	0.00%
7	6 of 213 genes, 2.8%	11 of 7166 genes, 0.2%	0.00018	0.00%
8	5 of 213 genes, 2.3%	7 of 7166 genes, 0.1%	0.0003	0.00%
9	5 of 213 genes, 2.3%	7 of 7166 genes, 0.1%	0.0003	0.00%
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11	10 of 213 genes, 4.7%	44 of 7166 genes, 0.6%	0.0003	0.00%
12	4 of 213 genes, 1.9%	4 of 7166 genes, 0.1%	0.00052	0.00%
13	4 of 213 genes, 1.9%	4 of 7166 genes, 0.1%	0.00052	0.00%
14	4 of 213 genes, 1.9%	4 of 7166 genes, 0.1%	0.00052	0.00%
15	14 of 213 genes, 6.6%	96 of 7166 genes, 1.3%	0.00052	0.00%
16	16 of 213 genes, 7.5%	126 of 7166 genes, 1.8%	0.00057	0.00%
17	14 of 213 genes, 6.6%	98 of 7166 genes, 1.4%	0.00067	0.00%
18	20 of 213 genes, 9.4%	197 of 7166 genes, 2.7%	0.00092	0.00%
19	143 of 213 genes, 67.1%	3685 of 7166 genes, 51.4%	0.00121	0.00%
20	16 of 213 genes, 7.5%	134 of 7166 genes, 1.9%	0.00132	0.00%
21	18 of 213 genes, 8.5%	167 of 7166 genes, 2.3%	0.00135	0.00%
22	15 of 213 genes, 7.0%	120 of 7166 genes, 1.7%	0.00157	0.00%
23	4 of 213 genes, 1.9%	5 of 7166 genes, 0.1%	0.00255	0.00%
24	4 of 213 genes, 1.9%	5 of 7166 genes, 0.1%	0.00255	0.00%
25	4 of 213 genes, 1.9%	5 of 7166 genes, 0.1%	0.00255	0.00%
26	4 of 213 genes, 1.9%	5 of 7166 genes, 0.1%	0.00255	0.00%
27	4 of 213 genes, 1.9%	5 of 7166 genes, 0.1%	0.00255	0.00%
28	8 of 213 genes, 3.8%	33 of 7166 genes, 0.5%	0.00268	0.00%
29	21 of 213 genes, 9.9%	230 of 7166 genes, 3.2%	0.00279	0.00%
30	7 of 213 genes, 3.3%	24 of 7166 genes, 0.3%	0.00287	0.00%
31	5 of 213 genes, 2.3%	10 of 7166 genes, 0.1%	0.00339	0.00%
32	5 of 213 genes, 2.3%	10 of 7166 genes, 0.1%	0.00339	0.00%
33	13 of 213 genes, 6.1%	97 of 7166 genes, 1.4%	0.00346	0.00%
34	6 of 213 genes, 2.8%	17 of 7166 genes, 0.2%	0.00416	0.00%
35	6 of 213 genes, 2.8%	17 of 7166 genes, 0.2%	0.00416	0.00%
36	10 of 213 genes, 4.7%	59 of 7166 genes, 0.8%	0.00527	0.00%
37	6 of 213 genes, 2.8%	18 of 7166 genes, 0.3%	0.00608	0.00%
38	6 of 213 genes, 2.8%	18 of 7166 genes, 0.3%	0.00608	0.00%
39	6 of 213 genes, 2.8%	18 of 7166 genes, 0.3%	0.00608	0.00%
40	21 of 213 genes, 9.9%	243 of 7166 genes, 3.4%	0.00663	0.00%
41	10 of 213 genes, 4.7%	61 of 7166 genes, 0.9%	0.00718	0.00%
42	4 of 213 genes, 1.9%	6 of 7166 genes, 0.1%	0.00747	0.00%
43	6 of 213 genes, 2.8%	19 of 7166 genes, 0.3%	0.00867	0.00%
44	6 of 213 genes, 2.8%	19 of 7166 genes, 0.3%	0.00867	0.00%
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		&	enzyme encoding genes for
		&	<i>YFH1</i> : 1 copy*
		&	YAL054C
		&	YBL011W
		&	YBL015W
		&	YBR011C
		&	YBR029C
		&	YCL038C
		&	YCR048W
		&	YDL052C
		&	YDR017C
		&	YDR072C
		&	YDR367W
False positives	Genes annotated to the term	&	YDR454C
	0 YHR007C, Q0130, YJL052W, YCR04	&	YDR536W
	0 Q0130, YJL052W, YHR051W, YGR2	&	YER026C
	0 YGR183C, Q0130, YJL052W, YBL09	&	YER170W
	0 YGR183C, Q0130, YJL052W, YBL09	&	YGL084C
	0 YGR183C, Q0130, YJL052W, YBL09	&	YGR157W
	0 YGR183C, Q0130, YJL052W, YBL09	&	YGR170W
	0 Q0130, YJL052W, YHR051W, YGR2	&	YGR202C
	0 YGR183C, Q0130, YJL052W, YBL09	&	YHR123W
	0 YGR183C, Q0130, YJL052W, YBL09	&	YJR001W
	0 YGR183C, Q0130, YJL052W, YBL09	&	YJR073C
	0 YGR183C, Q0130, YJL052W, YBL09	&	YJR148W
	0 YGR183C, Q0130, YJL052W, YBL09	&	YKL004W
	0 YGR183C, Q0130, YJL052W, YBL09	&	YKL067W
	0 Q0130, YJL052W, YHR051W, YGR2	&	YKR031C
	0 YGR183C, Q0130, YJL052W, YBL09	&	YKR043C
	0 YGR183C, Q0130, YJL052W, YBL09	&	YKR067W
	0 YGR183C, Q0130, YJL052W, YBL09	&	YKR080W
	0 YGR183C, Q0130, YJL052W, YBL09	&	YKR089C
	0 YGR183C, Q0130, YJL052W, YBL09	&	YLL043W
	0 YGR183C, Q0130, YJL052W, YBL09	&	YLR089C
	0 YGR183C, Q0130, YJL052W, YBL09	&	YLR133W
	0 YGR183C, Q0130, YJL052W, YBL09	&	YLR410W
	0 YGR183C, Q0130, YJL052W, YBL09	&	YMR165C
	0 YMR220W, YBR029C, Q0130, YJL052W	&	YMR208W
	0 YHR007C, YGR183C, YAL062W, YJL	&	YNL130C
	0 YGR183C, YJL052W, YHR051W, YG	&	YNR008W
	0 YGR183C, YJL045W, YHR051W, YD	&	YNR019W
	0 YGR183C, YJL045W, YHR051W, YD	&	YOL059W
	0 YGR183C, YJL045W, YHR051W, YD	&	YOR081C
	0 YMR220W, YAL062W, YJL052W, YI	&	YOR163W
	0 YGR183C, YJL045W, YHR051W, YD	&	YOR175C
	0 YKL067W, Q0130, YJL052W, YBL09	&	YOR245C
	0 YAL062W, YJL052W, YGL055W, YIL	&	YOR311C
	0 YAL062W, YJL052W, YGL055W, YIL	&	YPL189W
	0 YMR220W, YGR204W, YOR317W,	&	YPL262W

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2	0 YKL067W, Q0130, YJL052W, YBL09	&	YPR113W
3	0 YMR220W, YHR007C, YAL062W, Y	&	YPR140W
4	0 YBL030C, YGR183C, YHR051W, YDI	&	
5	0 YGR183C, YHR051W, YDL067C, YIL	&	
6	0 YBL030C, YGR183C, YLR044C, YHR	&	
7	0 YGR204W, YKL067W, Q0130, YJLO	&	
8	0 YKL067W, Q0130, YJL052W, YBL09	&	
9	0 YKL067W, Q0130, YJL052W, YBL09	&	
10	0 YDR377W, YJR121W, YGR192C, YP	&	
11	0 YGR204W, YKL067W, Q0130, YJLO	&	
12	0 YMR220W, YGR204W, YOR317W,	&	
13	0 YDR503C, YMR220W, YOR317W, Y	&	
14	0 YBL030C, YGR183C, YHR051W, YDI	&	
15	0 YHR007C, Q0130, YJL052W, YCR04	&	
16	0 YGR204W, YKL067W, Q0130, YJLO	&	
17	0 YGR204W, YKL067W, Q0130, YJLO	&	
18	0 YMR220W, YBR029C, YKL004W, YI	&	
19	0 YDR503C, YMR220W, YOR317W, Y	&	
20	0 YDR377W, YJR121W, YGR192C, YP	&	
21	0 YDR377W, YJR121W, YGR192C, YP	&	
22	0 YKL067W, Q0130, YJL052W, YBL09	&	
23	0 YKL067W, Q0130, YJL052W, YBL09	&	
24	0 YKL067W, Q0130, YJL052W, YBL09	&	
25	0 YHR007C, Q0130, YJL052W, YCR04	&	
26	0 YHR007C, Q0130, YJL052W, YCR04	&	
27	0 Q0130, YJL052W, YBL099W, YJR10	&	
28	0 YHR007C, Q0130, YJL052W, YCR04	&	
29	0 YJL052W, YLR044C, YPR074C, YALC	&	
30	0 YJL052W, YLR044C, YPR074C, YALC	&	
31	0 YDR377W, YJR121W, YGR192C, YP	&	
32	0 YMR220W, YHR007C, YOR245C, YI	&	
33	0 Q0130, YBL099W, YHR051W, YDLC	&	
34	0 YJL052W, YLR044C, YPR074C, YALC	&	
35	0 YJR095W, Q0130, YBL099W, YJR07	&	
36	0 YJL052W, YLR044C, YPR074C, YALC	&	
37	0 YDR377W, YJR121W, YPL078C, Q0	&	
38	0 YDR377W, YJR121W, YPL078C, Q0	&	
39	0 YMR220W, YHR007C, YOR245C, YI	&	
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41	0 Q0130, YBL099W, YHR051W, YDLC	&	
42	0 YOR317W, YJL052W, YLR044C, YGI	&	
43	0 YJR095W, YOR317W, YBL030C, Q0	&	
44	0 YDR503C, YMR220W, YBR029C, YK	&	
45	0 YMR220W, YKL067W, YGR183C, YI	&	
46	0 YMR145C, YBR218C, YGR192C, YH	&	
47	0 YMR220W, YJL167W, YHR007C, YC	&	
48	0 YMR220W, YJL167W, YHR007C, YC	&	
49	0 YMR220W, YJL167W, YHR007C, YC	&	
50	0 YKR067W, YMR220W, YMR165C, Y	&	
51	0 YJR095W, YBL030C, YPL189W, Q0	&	
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0 Q0130, YBL099W, YHR051W, YDLC	&
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0 YMR220W, YHR007C, YGR183C, Q	&
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0 YJL121C, YGR256W, YDR050C, YBR	&
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0 YAL044C, YGR204W, YOR184W, Y/	&

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5	0 YMR145C, YDR050C, YBR196C, YBI
6	0 YMR220W, YBR029C, YKL004W, YH
7	0 YJL121C, YMR145C, YBR218C, YGR
8	0 YNR043W, YMR220W, YAL054C, Y
9	0 YDR050C, YBR196C, YBR218C, YGR
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20	0 YDR050C, YBR196C, YGR192C, YHF
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44	0 YLR058C, YAL044C, YMR189W, YD
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49	0 YNR043W, YMR220W, YMR208W, Y
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51	0 YJL121C, YDR050C, YBR196C, YGR
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which there is flux only in:	enzyme encoding genes associated with reactions having non-zero flux differences ***
<i>YFH1</i> : 2 copies**	
YAL044C	Q0045
YBL011W	Q0080
YBR029C	Q0085
YBR252W	Q0105
YBR263W	Q0130
YCL038C	Q0250
YCR048W	Q0275
YDL022W	YAL038W
YDR019C	YAL054C
YDR072C	YAL062W
YDR148C	YBL030C
YDR367W	YBL039C
YDR454C	YBL045C
YDR503C	YBL099W
YER026C	YBR039W
YFL018C	YBR041W
YGR157W	YBR085W
YGR209C	YBR117C
YGR240C	YBR196C
YHR208W	YBR218C
YIL125W	YBR291C
YJR073C	YCR012W
YJR095W	YDL004W
YKL004W	YDL067C
YKL146W	YDL085W
YKR067W	YDL141W
YMR189W	YDR050C
YMR205C	YDR178W
YMR267W	YDR298C
YNL101W	YDR322C-A
YNL169C	YDR377W
YNR008W	YDR502C
YNR019W	YDR529C
YOL059W	YEL024W
YOR175C	YEL039C
YOR245C	YER005W
YOR388C	YER043C
YPR113W	YER053C
YPR140W	YER070W
	YER081W
	YFR033C
	YGL001C
	YGL012W
	YGL055W
	YGL062W
	YGL080W
	YGL187C

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3	YGL202W
4	YGR060W
5	YGR087C
6	YGR175C
7	YGR180C
8	YGR183C
9	YGR192C
10	YGR204W
11	YGR208W
12	YGR243W
13	YGR248W
14	YGR254W
15	YGR256W
16	YHR001W-A
17	YHR002W
18	YHR007C
19	YHR042W
20	YHR051W
21	YHR072W
22	YHR137W
23	YHR144C
24	YHR162W
25	YHR163W
26	YHR174W
27	YHR183W
28	YHR190W
29	YHR208W
30	YIL066C
31	YIL074C
32	YIL111W
33	YJL026W
34	YJL045W
35	YJL052W
36	YJL121C
37	YJL166W
38	YJL167W
39	YJR009C
40	YJR048W
41	YJR077C
42	YJR103W
43	YJR105W
44	YJR121W
45	YJR148W
46	YKL016C
47	YKL035W
48	YKL060C
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YKL148C
YKL152C
YKL182W
YLL041C
YLL052C
YLR027C
YLR038C
YLR044C
YLR058C
YLR100W
YLR134W
YLR153C
YLR180W
YLR295C
YLR304C
YLR354C
YLR395C
YLR450W
YML075C
YML081C-A
YML120C
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YMR056C
YMR145C
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YMR256C
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YNR016C
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YOR375C
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YPL078C
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YPL271W
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YPR191W
YPR192W

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Date	Tue Apr 10 10:33:14 EDT 2018
Aspect	P
P-value cutoff	0.01
Calculate FDR	Yes
Regulation links followed	Yes
Bonferroni correction	Yes
Annotation file	gene_association.sgd
Evidence codes used	IEA (51113), IEP (119), IGI (5639 IBA (19185), IPI (3211), ND (371 ISS (1824), HMP (80), RCA (6), IC IMP (13380), TAS (467), ISM (12 HGI (16), ISO (9), ISA (299)
Gene Ontology term	Cluster frequency
*	
glycerolipid metabolic process	24 of 49 genes, 49.0%
organophosphate metabolic process	33 of 49 genes, 67.3%
cellular lipid metabolic process	30 of 49 genes, 61.2%
lipid metabolic process	30 of 49 genes, 61.2%
phospholipid metabolic process	24 of 49 genes, 49.0%
glycerolipid biosynthetic process	20 of 49 genes, 40.8%
lipid biosynthetic process	24 of 49 genes, 49.0%
phospholipid biosynthetic process	20 of 49 genes, 40.8%
organophosphate biosynthetic process	26 of 49 genes, 53.1%
phosphorus metabolic process	36 of 49 genes, 73.5%
glycerophospholipid biosynthetic process	17 of 49 genes, 34.7%
glycerophospholipid metabolic process	19 of 49 genes, 38.8%
phosphate-containing compound metabolic process	34 of 49 genes, 69.4%
phosphatidylcholine biosynthetic process	7 of 49 genes, 14.3%
phosphatidylcholine metabolic process	7 of 49 genes, 14.3%
alcohol metabolic process	10 of 49 genes, 20.4%
ammonium ion metabolic process	7 of 49 genes, 14.3%
polyol metabolic process	7 of 49 genes, 14.3%
CDP-choline pathway	4 of 49 genes, 8.2%
CDP-diacylglycerol biosynthetic process	4 of 49 genes, 8.2%
CDP-diacylglycerol metabolic process	4 of 49 genes, 8.2%
cellular metabolic process	46 of 49 genes, 93.9%
organic hydroxy compound metabolic process	10 of 49 genes, 20.4%
small molecule metabolic process	21 of 49 genes, 42.9%
metabolic process	46 of 49 genes, 93.9%
phosphatidylethanolamine biosynthetic process	4 of 49 genes, 8.2%
glycerol transport	4 of 49 genes, 8.2%
acylglycerol metabolic process	5 of 49 genes, 10.2%
triglyceride metabolic process	5 of 49 genes, 10.2%
primary metabolic process	44 of 49 genes, 89.8%
neutral lipid metabolic process	5 of 49 genes, 10.2%
phosphatidylethanolamine metabolic process	4 of 49 genes, 8.2%
organic substance metabolic process	44 of 49 genes, 89.8%
organic substance biosynthetic process	34 of 49 genes, 69.4%

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2	biosynthetic process	34 of 49 genes, 69.4%
3	glycerol metabolic process	4 of 49 genes, 8.2%
4	polyol transport	4 of 49 genes, 8.2%
5	alditol metabolic process	4 of 49 genes, 8.2%
6	triglyceride biosynthetic process	3 of 49 genes, 6.1%
7	neutral lipid biosynthetic process	3 of 49 genes, 6.1%
8	acylglycerol biosynthetic process	3 of 49 genes, 6.1%
9	cellular biosynthetic process	32 of 49 genes, 65.3%
10	inositol phosphoceramide metabolic process	3 of 49 genes, 6.1%
11	inositol phosphate metabolic process	3 of 49 genes, 6.1%
12	sphingolipid metabolic process	5 of 49 genes, 10.2%
13	membrane lipid metabolic process	6 of 49 genes, 12.2%
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17	organophosphate metabolic process	21 of 39 genes, 53.8%
18	cellular lipid metabolic process	18 of 39 genes, 46.2%
19	lipid metabolic process	18 of 39 genes, 46.2%
20	phospholipid metabolic process	14 of 39 genes, 35.9%
21	glycerolipid metabolic process	13 of 39 genes, 33.3%
22	glycerolipid biosynthetic process	11 of 39 genes, 28.2%
23	lipid biosynthetic process	14 of 39 genes, 35.9%
24	phosphorus metabolic process	23 of 39 genes, 59.0%
25	organophosphate biosynthetic process	15 of 39 genes, 38.5%
26	phosphate-containing compound metabolic process	22 of 39 genes, 56.4%
27	glycerophospholipid metabolic process	11 of 39 genes, 28.2%
28	glycine metabolic process	5 of 39 genes, 12.8%
29	glycerophospholipid biosynthetic process	9 of 39 genes, 23.1%
30	phospholipid biosynthetic process	10 of 39 genes, 25.6%
31	glycine catabolic process	4 of 39 genes, 10.3%
32	small molecule metabolic process	20 of 39 genes, 51.3%
33	serine family amino acid catabolic process	4 of 39 genes, 10.3%
34	neurotransmitter metabolic process	5 of 39 genes, 12.8%
35	regulation of neurotransmitter levels	5 of 39 genes, 12.8%
36	neurotransmitter catabolic process	4 of 39 genes, 10.3%
37	drug catabolic process	6 of 39 genes, 15.4%
38	glycine decarboxylation via glycine cleavage system	3 of 39 genes, 7.7%
39	drug metabolic process	11 of 39 genes, 28.2%
40	amino acid transmembrane export from vacuole	3 of 39 genes, 7.7%
41	carboxylic acid catabolic process	7 of 39 genes, 17.9%
42	organic acid catabolic process	7 of 39 genes, 17.9%
43	cellular amino acid catabolic process	6 of 39 genes, 15.4%
44	cellular metabolic process	36 of 39 genes, 92.3%
45	2-oxoglutarate metabolic process	3 of 39 genes, 7.7%
46	CDP-diacylglycerol biosynthetic process	3 of 39 genes, 7.7%
47	CDP-diacylglycerol metabolic process	3 of 39 genes, 7.7%
48	serine family amino acid metabolic process	5 of 39 genes, 12.8%
49	one-carbon metabolic process	4 of 39 genes, 10.3%
50	oxidation-reduction process	12 of 39 genes, 30.8%
51	inositol phosphoceramide metabolic process	3 of 39 genes, 7.7%
52	metabolic process	36 of 39 genes, 92.3%
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sphingolipid metabolic process	5 of 39 genes, 12.8%
alpha-amino acid catabolic process	5 of 39 genes, 12.8%
vacuolar transmembrane transport	3 of 39 genes, 7.7%
cofactor metabolic process	9 of 39 genes, 23.1%
organophosphate catabolic process	5 of 39 genes, 12.8%
small molecule catabolic process	7 of 39 genes, 17.9%
carboxylic acid metabolic process	11 of 39 genes, 28.2%
glycerol-3-phosphate catabolic process	2 of 39 genes, 5.1%
glycolytic process through fructose-6-phosphate	2 of 39 genes, 5.1%
oxoacid metabolic process	11 of 39 genes, 28.2%
organic acid metabolic process	11 of 39 genes, 28.2%

small molecule metabolic process	133 of 151 genes, 88.1%
ribose phosphate metabolic process	77 of 151 genes, 51.0%
nucleotide metabolic process	84 of 151 genes, 55.6%
nucleoside phosphate metabolic process	84 of 151 genes, 55.6%
nucleobase-containing small molecule metabolic process	87 of 151 genes, 57.6%
ribonucleoside triphosphate metabolic process	64 of 151 genes, 42.4%
ATP metabolic process	62 of 151 genes, 41.1%
purine ribonucleoside triphosphate metabolic process	62 of 151 genes, 41.1%
nucleoside triphosphate metabolic process	64 of 151 genes, 42.4%
purine nucleoside triphosphate metabolic process	62 of 151 genes, 41.1%
purine nucleoside monophosphate metabolic process	63 of 151 genes, 41.7%
purine ribonucleoside monophosphate metabolic process	63 of 151 genes, 41.7%
purine nucleotide metabolic process	66 of 151 genes, 43.7%
organophosphate metabolic process	92 of 151 genes, 60.9%
purine-containing compound metabolic process	68 of 151 genes, 45.0%
ribonucleotide metabolic process	67 of 151 genes, 44.4%
purine ribonucleotide metabolic process	65 of 151 genes, 43.0%
nucleoside monophosphate metabolic process	64 of 151 genes, 42.4%
ribonucleoside monophosphate metabolic process	63 of 151 genes, 41.7%
carbohydrate derivative metabolic process	85 of 151 genes, 56.3%
drug metabolic process	74 of 151 genes, 49.0%
phosphorus metabolic process	99 of 151 genes, 65.6%
generation of precursor metabolites and energy	59 of 151 genes, 39.1%
phosphate-containing compound metabolic process	93 of 151 genes, 61.6%
oxidation-reduction process	75 of 151 genes, 49.7%
oxidative phosphorylation	30 of 151 genes, 19.9%
respiratory electron transport chain	31 of 151 genes, 20.5%
ATP synthesis coupled electron transport	29 of 151 genes, 19.2%
mitochondrial ATP synthesis coupled electron transport	29 of 151 genes, 19.2%
electron transport chain	34 of 151 genes, 22.5%
energy derivation by oxidation of organic compounds	44 of 151 genes, 29.1%
ribonucleoside triphosphate biosynthetic process	32 of 151 genes, 21.2%
ATP biosynthetic process	30 of 151 genes, 19.9%
cellular respiration	38 of 151 genes, 25.2%
nucleoside triphosphate biosynthetic process	32 of 151 genes, 21.2%
purine nucleoside triphosphate biosynthetic process	30 of 151 genes, 19.9%
purine ribonucleoside triphosphate biosynthetic process	30 of 151 genes, 19.9%

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2	coenzyme metabolic process	44 of 151 genes, 29.1%
3	small molecule biosynthetic process	57 of 151 genes, 37.7%
4	carboxylic acid metabolic process	60 of 151 genes, 39.7%
5	organic acid metabolic process	61 of 151 genes, 40.4%
6	aerobic respiration	33 of 151 genes, 21.9%
7	nucleotide biosynthetic process	39 of 151 genes, 25.8%
8	purine nucleoside monophosphate biosynthetic process	31 of 151 genes, 20.5%
9	purine ribonucleoside monophosphate biosynthetic process	31 of 151 genes, 20.5%
10	oxoacid metabolic process	60 of 151 genes, 39.7%
11	nucleoside phosphate biosynthetic process	39 of 151 genes, 25.8%
12	purine-containing compound biosynthetic process	33 of 151 genes, 21.9%
13	organophosphate biosynthetic process	48 of 151 genes, 31.8%
14	purine nucleotide biosynthetic process	32 of 151 genes, 21.2%
15	cofactor metabolic process	46 of 151 genes, 30.5%
16	ribonucleotide biosynthetic process	33 of 151 genes, 21.9%
17	nucleoside monophosphate biosynthetic process	32 of 151 genes, 21.2%
18	purine ribonucleotide biosynthetic process	31 of 151 genes, 20.5%
19	ribose phosphate biosynthetic process	33 of 151 genes, 21.9%
20	ribonucleoside monophosphate biosynthetic process	31 of 151 genes, 20.5%
21	energy coupled proton transport, down electrochemical gradient	18 of 151 genes, 11.9%
22	ATP synthesis coupled proton transport	18 of 151 genes, 11.9%
23	proton transmembrane transport	29 of 151 genes, 19.2%
24	pyridine nucleotide metabolic process	28 of 151 genes, 18.5%
25	nicotinamide nucleotide metabolic process	28 of 151 genes, 18.5%
26	organic cyclic compound metabolic process	109 of 151 genes, 72.2%
27	cellular metabolic process	142 of 151 genes, 94.0%
28	pyridine-containing compound metabolic process	28 of 151 genes, 18.5%
29	monovalent inorganic cation transport	29 of 151 genes, 19.2%
30	oxidoreduction coenzyme metabolic process	28 of 151 genes, 18.5%
31	primary metabolic process	138 of 151 genes, 91.4%
32	ion transmembrane transport	39 of 151 genes, 25.8%
33	organic substance metabolic process	139 of 151 genes, 92.1%
34	metabolic process	142 of 151 genes, 94.0%
35	carbohydrate derivative biosynthetic process	39 of 151 genes, 25.8%
36	sterol biosynthetic process	19 of 151 genes, 12.6%
37	monocarboxylic acid metabolic process	34 of 151 genes, 22.5%
38	steroid biosynthetic process	19 of 151 genes, 12.6%
39	inorganic cation transmembrane transport	30 of 151 genes, 19.9%
40	ion transport	45 of 151 genes, 29.8%
41	ergosterol biosynthetic process	17 of 151 genes, 11.3%
42	phytosteroid biosynthetic process	17 of 151 genes, 11.3%
43	cellular alcohol biosynthetic process	17 of 151 genes, 11.3%
44	cellular lipid biosynthetic process	17 of 151 genes, 11.3%
45	phosphorylation	45 of 151 genes, 29.8%
46	secondary alcohol biosynthetic process	17 of 151 genes, 11.3%
47	inorganic ion transmembrane transport	31 of 151 genes, 20.5%
48	ergosterol metabolic process	17 of 151 genes, 11.3%
49	phytosteroid metabolic process	17 of 151 genes, 11.3%
50	pyruvate metabolic process	20 of 151 genes, 13.2%
51	secondary alcohol metabolic process	17 of 151 genes, 11.3%
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2	organic hydroxy compound biosynthetic process	23 of 151 genes, 15.2%
3	mitochondrial electron transport, ubiquinol to cytochrome	12 of 151 genes, 7.9%
4	cellular alcohol metabolic process	17 of 151 genes, 11.3%
5	sterol metabolic process	19 of 151 genes, 12.6%
6	alcohol metabolic process	24 of 151 genes, 15.9%
7	mitochondrial electron transport, cytochrome c to oxygen	13 of 151 genes, 8.6%
8	steroid metabolic process	19 of 151 genes, 12.6%
9	alcohol biosynthetic process	20 of 151 genes, 13.2%
10	cation transport	33 of 151 genes, 21.9%
11	organic hydroxy compound metabolic process	27 of 151 genes, 17.9%
12	aerobic electron transport chain	13 of 151 genes, 8.6%
13	glyceraldehyde-3-phosphate metabolic process	13 of 151 genes, 8.6%
14	cation transmembrane transport	30 of 151 genes, 19.9%
15	transmembrane transport	44 of 151 genes, 29.1%
16	ATP hydrolysis coupled cation transmembrane transport	16 of 151 genes, 10.6%
17	organonitrogen compound metabolic process	103 of 151 genes, 68.2%
18	pentose-phosphate shunt	12 of 151 genes, 7.9%
19	ADP metabolic process	16 of 151 genes, 10.6%
20	purine nucleoside diphosphate metabolic process	16 of 151 genes, 10.6%
21	purine ribonucleoside diphosphate metabolic process	16 of 151 genes, 10.6%
22	ribonucleoside diphosphate metabolic process	16 of 151 genes, 10.6%
23	NADP metabolic process	13 of 151 genes, 8.6%
24	nucleoside diphosphate metabolic process	16 of 151 genes, 10.6%
25	organic acid biosynthetic process	30 of 151 genes, 19.9%
26	carboxylic acid biosynthetic process	30 of 151 genes, 19.9%
27	cellular aromatic compound metabolic process	92 of 151 genes, 60.9%
28	lipid biosynthetic process	28 of 151 genes, 18.5%
29	glucose metabolic process	18 of 151 genes, 11.9%
30	glucose 6-phosphate metabolic process	12 of 151 genes, 7.9%
31	monosaccharide metabolic process	20 of 151 genes, 13.2%
32	cellular process	145 of 151 genes, 96.0%
33	heterocycle metabolic process	90 of 151 genes, 59.6%
34	nucleobase-containing compound metabolic process	87 of 151 genes, 57.6%
35	cellular lipid metabolic process	32 of 151 genes, 21.2%
36	hexose metabolic process	18 of 151 genes, 11.9%
37	gluconeogenesis	13 of 151 genes, 8.6%
38	hexose biosynthetic process	13 of 151 genes, 8.6%
39	carbohydrate metabolic process	30 of 151 genes, 19.9%
40	monocarboxylic acid biosynthetic process	18 of 151 genes, 11.9%
41	monosaccharide biosynthetic process	13 of 151 genes, 8.6%
42	organic cyclic compound biosynthetic process	62 of 151 genes, 41.1%
43	lipid metabolic process	32 of 151 genes, 21.2%
44	glycolytic process	12 of 151 genes, 7.9%
45	ATP generation from ADP	12 of 151 genes, 7.9%
46	pyruvate biosynthetic process	12 of 151 genes, 7.9%
47	biosynthetic process	94 of 151 genes, 62.3%
48	nucleoside diphosphate phosphorylation	12 of 151 genes, 7.9%
49	acyl-CoA metabolic process	10 of 151 genes, 6.6%
50	thioester metabolic process	10 of 151 genes, 6.6%
51	isoprenoid biosynthetic process	9 of 151 genes, 6.0%
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2	cofactor biosynthetic process	21 of 151 genes, 13.9%
3	nucleotide catabolic process	12 of 151 genes, 7.9%
4	nucleobase-containing small molecule biosynthetic process	15 of 151 genes, 9.9%
5	nucleoside phosphate catabolic process	12 of 151 genes, 7.9%
6	organic substance biosynthetic process	92 of 151 genes, 60.9%
7	nucleotide phosphorylation	12 of 151 genes, 7.9%
8	isoprenoid metabolic process	9 of 151 genes, 6.0%
9	alpha-amino acid metabolic process	22 of 151 genes, 14.6%
10	cellular aldehyde metabolic process	13 of 151 genes, 8.6%
11	nicotinamide nucleotide biosynthetic process	12 of 151 genes, 7.9%
12	terpenoid metabolic process	6 of 151 genes, 4.0%
13	farnesyl diphosphate metabolic process	6 of 151 genes, 4.0%
14	coenzyme biosynthetic process	18 of 151 genes, 11.9%
15	pyridine-containing compound biosynthetic process	13 of 151 genes, 8.6%
16	pyridine nucleotide biosynthetic process	12 of 151 genes, 7.9%
17	sulfur compound metabolic process	18 of 151 genes, 11.9%
18	organophosphate catabolic process	12 of 151 genes, 7.9%
19	long-chain fatty acid metabolic process	6 of 151 genes, 4.0%
20	cellular biosynthetic process	87 of 151 genes, 57.6%
21	isopentenyl diphosphate biosynthetic process	5 of 151 genes, 3.3%
22	isopentenyl diphosphate metabolic process	5 of 151 genes, 3.3%
23	acetyl-CoA metabolic process	7 of 151 genes, 4.6%
24	cellular nitrogen compound metabolic process	94 of 151 genes, 62.3%
25	mitochondrial transport	15 of 151 genes, 9.9%
26	tricarboxylic acid cycle	9 of 151 genes, 6.0%
27	citrate metabolic process	9 of 151 genes, 6.0%
28	tricarboxylic acid metabolic process	9 of 151 genes, 6.0%
29	terpenoid biosynthetic process	5 of 151 genes, 3.3%
30	farnesyl diphosphate biosynthetic process	5 of 151 genes, 3.3%
31	cellular amino acid metabolic process	22 of 151 genes, 14.6%
32	pentose-phosphate shunt, oxidative branch	5 of 151 genes, 3.3%
33	nitrogen compound metabolic process	109 of 151 genes, 72.2%
34	carbohydrate catabolic process	13 of 151 genes, 8.6%
35	carbohydrate biosynthetic process	14 of 151 genes, 9.3%
36	isopentenyl diphosphate biosynthetic process, mevalonate	4 of 151 genes, 2.6%
37	long-chain fatty acid biosynthetic process	4 of 151 genes, 2.6%
38	dicarboxylic acid metabolic process	10 of 151 genes, 6.6%
39	L-serine biosynthetic process	4 of 151 genes, 2.6%
40	heme transport	4 of 151 genes, 2.6%
41	ethanol metabolic process	6 of 151 genes, 4.0%
42	branched-chain amino acid catabolic process	5 of 151 genes, 3.3%
43	primary alcohol metabolic process	6 of 151 genes, 4.0%
44	alpha-amino acid biosynthetic process	13 of 151 genes, 8.6%
45	L-serine metabolic process	5 of 151 genes, 3.3%
46	deoxyribonucleotide metabolic process	5 of 151 genes, 3.3%
47	deoxyribonucleotide biosynthetic process	5 of 151 genes, 3.3%
48	ADP transport	4 of 151 genes, 2.6%
49	methionine metabolic process	8 of 151 genes, 5.3%
50	cellular amino acid biosynthetic process	13 of 151 genes, 8.6%
51	sulfur compound biosynthetic process	10 of 151 genes, 6.6%
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2	aromatic compound catabolic process	17 of 151 genes, 11.3%
3	aspartate metabolic process	4 of 151 genes, 2.6%
4	anaerobic respiration	4 of 151 genes, 2.6%
5	glycolytic fermentation to ethanol	4 of 151 genes, 2.6%
6	glycolytic fermentation	4 of 151 genes, 2.6%
7	nitrogenous compound fermentation	4 of 151 genes, 2.6%
8	aspartate family amino acid metabolic process	10 of 151 genes, 6.6%
9	organonitrogen compound biosynthetic process	51 of 151 genes, 33.8%
10	monocarboxylic acid transport	6 of 151 genes, 4.0%
11	sulfur amino acid metabolic process	8 of 151 genes, 5.3%
12	farnesyl diphosphate biosynthetic process, mevalonate pat	3 of 151 genes, 2.0%
13	long-chain fatty acid import	3 of 151 genes, 2.0%
14	isoprenoid biosynthetic process via mevalonate	3 of 151 genes, 2.0%
15	fermentation	5 of 151 genes, 3.3%
16	organic cyclic compound catabolic process	17 of 151 genes, 11.3%
17	mitochondrial electron transport, succinate to ubiquinone	4 of 151 genes, 2.6%
18	dicarboxylic acid biosynthetic process	6 of 151 genes, 4.0%
19	mitochondrial membrane organization	8 of 151 genes, 5.3%
20	small molecule catabolic process	13 of 151 genes, 8.6%
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), HDA (7284),
9), IC (1450),
A (16629),
58), NAS (101),

Genome frequency	Corrected p-value	FDR	False positives
138 of 7166 genes, 1.9%	9.13E-27	0.00%	0.00%
445 of 7166 genes, 6.2%	1.59E-26	0.00%	0.00%
326 of 7166 genes, 4.5%	3.21E-26	0.00%	0.00%
352 of 7166 genes, 4.9%	3.32E-25	0.00%	0.00%
164 of 7166 genes, 2.3%	7.50E-25	0.00%	0.00%
87 of 7166 genes, 1.2%	2.56E-24	0.00%	0.00%
215 of 7166 genes, 3.0%	6.46E-22	0.00%	0.00%
117 of 7166 genes, 1.6%	1.62E-21	0.00%	0.00%
296 of 7166 genes, 4.1%	2.20E-21	0.00%	0.00%
860 of 7166 genes, 12.0%	5.20E-21	0.00%	0.00%
81 of 7166 genes, 1.1%	1.68E-19	0.00%	0.00%
123 of 7166 genes, 1.7%	2.13E-19	0.00%	0.00%
828 of 7166 genes, 11.6%	5.29E-19	0.00%	0.00%
19 of 7166 genes, 0.3%	5.36E-09	0.00%	0.00%
21 of 7166 genes, 0.3%	1.22E-08	0.00%	0.00%
100 of 7166 genes, 1.4%	2.34E-07	0.00%	0.00%
32 of 7166 genes, 0.4%	3.35E-07	0.00%	0.00%
33 of 7166 genes, 0.5%	4.23E-07	0.00%	0.00%
5 of 7166 genes, 0.1%	2.42E-06	0.00%	0.00%
5 of 7166 genes, 0.1%	2.42E-06	0.00%	0.00%
5 of 7166 genes, 0.1%	2.42E-06	0.00%	0.00%
4102 of 7166 genes, 57.2%	2.59E-06	0.00%	0.00%
143 of 7166 genes, 2.0%	7.81E-06	0.00%	0.00%
845 of 7166 genes, 11.8%	9.69E-06	0.00%	0.00%
4286 of 7166 genes, 59.8%	1.65E-05	0.00%	0.00%
7 of 7166 genes, 0.1%	1.68E-05	0.00%	0.00%
7 of 7166 genes, 0.1%	1.68E-05	0.00%	0.00%
17 of 7166 genes, 0.2%	1.78E-05	0.00%	0
17 of 7166 genes, 0.2%	1.78E-05	0.00%	0
3894 of 7166 genes, 54.3%	2.23E-05	0.00%	0.00%
18 of 7166 genes, 0.3%	2.45E-05	0.00%	0.00%
10 of 7166 genes, 0.1%	9.94E-05	0.00%	0.00%
4049 of 7166 genes, 56.5%	9.99E-05	0.00%	0.00%
2501 of 7166 genes, 34.9%	0.00021	0.00%	0.00%

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2	2512 of 7166 genes, 35.1%	0.00024	0.00%	0.00%
3	14 of 7166 genes, 0.2%	0.00046	0.00%	0.00%
4	14 of 7166 genes, 0.2%	0.00046	0.00%	0.00%
5	16 of 7166 genes, 0.2%	0.00083	0.00%	0.00%
6	6 of 7166 genes, 0.1%	0.00149	0.00%	0.00%
7	6 of 7166 genes, 0.1%	0.00149	0.00%	0.00%
8	6 of 7166 genes, 0.1%	0.00149	0.00%	0.00%
9	2469 of 7166 genes, 34.5%	0.00246	0.00%	0.00%
10	7 of 7166 genes, 0.1%	0.00261	0.00%	0.00%
11	8 of 7166 genes, 0.1%	0.00415	0.00%	0.00%
12	8 of 7166 genes, 0.1%	0.00415	0.00%	0.00%
13	51 of 7166 genes, 0.7%	0.00569	0.00%	0.00%
14	86 of 7166 genes, 1.2%	0.00586	0.00%	0.00%
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17	445 of 7166 genes, 6.2%	1.84E-13	0.00%	0.00%
18	326 of 7166 genes, 4.5%	3.37E-12	0.00%	0.00%
19	352 of 7166 genes, 4.9%	1.28E-11	0.00%	0.00%
20	164 of 7166 genes, 2.3%	1.67E-11	0.00%	0.00%
21	138 of 7166 genes, 1.9%	4.41E-11	0.00%	0.00%
22	87 of 7166 genes, 1.2%	1.64E-10	0.00%	0.00%
23	215 of 7166 genes, 3.0%	7.18E-10	0.00%	0.00%
24	860 of 7166 genes, 12.0%	8.43E-10	0.00%	0.00%
25	296 of 7166 genes, 4.1%	3.69E-09	0.00%	0.00%
26	828 of 7166 genes, 11.6%	4.03E-09	0.00%	0.00%
27	123 of 7166 genes, 1.7%	7.96E-09	0.00%	0.00%
28	8 of 7166 genes, 0.1%	5.95E-08	0.00%	0.00%
29	81 of 7166 genes, 1.1%	9.05E-08	0.00%	0.00%
30	117 of 7166 genes, 1.6%	1.14E-07	0.00%	0.00%
31	4 of 7166 genes, 0.1%	2.20E-07	0.00%	0.00%
32	845 of 7166 genes, 11.8%	4.91E-07	0.00%	0.00%
33	7 of 7166 genes, 0.1%	7.61E-06	0.00%	0.00%
34	18 of 7166 genes, 0.3%	8.75E-06	0.00%	0.00%
35	19 of 7166 genes, 0.3%	1.18E-05	0.00%	0.00%
36	9 of 7166 genes, 0.1%	2.72E-05	0.00%	0.00%
37	44 of 7166 genes, 0.6%	3.10E-05	0.00%	0.00%
38	3 of 7166 genes, 0.0%	4.38E-05	0.00%	0.00%
39	279 of 7166 genes, 3.9%	4.77E-05	0.00%	0
40	4 of 7166 genes, 0.1%	0.00017	0.00%	0
41	102 of 7166 genes, 1.4%	0.00029	0.00%	0.00%
42	103 of 7166 genes, 1.4%	0.00032	0.00%	0.00%
43	65 of 7166 genes, 0.9%	0.00033	0.00%	0.00%
44	4102 of 7166 genes, 57.2%	0.00042	0.00%	0.00%
45	5 of 7166 genes, 0.1%	0.00043	0.00%	0.00%
46	5 of 7166 genes, 0.1%	0.00043	0.00%	0.00%
47	5 of 7166 genes, 0.1%	0.00043	0.00%	0.00%
48	42 of 7166 genes, 0.6%	0.00079	0.00%	0.00%
49	19 of 7166 genes, 0.3%	0.0008	0.00%	0.00%
50	462 of 7166 genes, 6.4%	0.00103	0.00%	0.00%
51	7 of 7166 genes, 0.1%	0.00151	0.00%	0.00%
52	4286 of 7166 genes, 59.8%	0.00173	0.00%	0.00%
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2	51 of 7166 genes, 0.7%	0.0021	0.00%	0.00%
3	51 of 7166 genes, 0.7%	0.0021	0.00%	0.00%
4	8 of 7166 genes, 0.1%	0.0024	0.00%	0.00%
5	271 of 7166 genes, 3.8%	0.00318	0.00%	0.00%
6	57 of 7166 genes, 0.8%	0.00366	0.00%	0.00%
7	154 of 7166 genes, 2.1%	0.00468	0.00%	0.00%
8	458 of 7166 genes, 6.4%	0.00618	0.00%	0.00%
9	2 of 7166 genes, 0.0%	0.00848	0.00%	0.00%
10	2 of 7166 genes, 0.0%	0.00848	0.00%	0.00%
11	476 of 7166 genes, 6.6%	0.00886	0.00%	0.00%
12	478 of 7166 genes, 6.7%	0.00922	0.00%	0.00%
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16	845 of 7166 genes, 11.8%	1.31E-103	0.00%	0.00%
17	183 of 7166 genes, 2.6%	6.66E-85	0.00%	0.00%
18	247 of 7166 genes, 3.4%	1.87E-84	0.00%	0.00%
19	252 of 7166 genes, 3.5%	1.38E-83	0.00%	0.00%
20	288 of 7166 genes, 4.0%	7.82E-83	0.00%	0.00%
21	115 of 7166 genes, 1.6%	4.01E-79	0.00%	0.00%
22	106 of 7166 genes, 1.5%	2.56E-78	0.00%	0.00%
23	111 of 7166 genes, 1.5%	1.61E-76	0.00%	0.00%
24	124 of 7166 genes, 1.7%	3.44E-76	0.00%	0.00%
25	113 of 7166 genes, 1.6%	7.84E-76	0.00%	0.00%
26	130 of 7166 genes, 1.8%	1.58E-72	0.00%	0.00%
27	130 of 7166 genes, 1.8%	1.58E-72	0.00%	0.00%
28	152 of 7166 genes, 2.1%	2.65E-72	0.00%	0.00%
29	445 of 7166 genes, 6.2%	8.33E-72	0.00%	0.00%
30	170 of 7166 genes, 2.4%	9.77E-72	0.00%	0.00%
31	163 of 7166 genes, 2.3%	1.59E-71	0.00%	0.00%
32	148 of 7166 genes, 2.1%	1.77E-71	0.00%	0.00%
33	153 of 7166 genes, 2.1%	1.62E-68	0.00%	0.00%
34	148 of 7166 genes, 2.1%	6.50E-68	0.00%	0.00%
35	385 of 7166 genes, 5.4%	1.40E-67	0.00%	0.00%
36	279 of 7166 genes, 3.9%	1.59E-63	0.00%	0.00%
37	860 of 7166 genes, 12.0%	6.28E-53	0.00%	0.00%
38	230 of 7166 genes, 3.2%	7.57E-48	0.00%	0.00%
39	828 of 7166 genes, 11.6%	1.68E-47	0.00%	0.00%
40	462 of 7166 genes, 6.4%	1.75E-47	0.00%	0.00%
41	41 of 7166 genes, 0.6%	3.31E-40	0.00%	0.00%
42	47 of 7166 genes, 0.7%	2.46E-39	0.00%	0.00%
43	39 of 7166 genes, 0.5%	3.96E-39	0.00%	0.00%
44	39 of 7166 genes, 0.5%	3.96E-39	0.00%	0.00%
45	72 of 7166 genes, 1.0%	2.13E-36	0.00%	0.00%
46	169 of 7166 genes, 2.4%	1.25E-34	0.00%	0.00%
47	66 of 7166 genes, 0.9%	1.44E-34	0.00%	0.00%
48	57 of 7166 genes, 0.8%	1.12E-33	0.00%	0.00%
49	116 of 7166 genes, 1.6%	1.15E-33	0.00%	0.00%
50	70 of 7166 genes, 1.0%	1.67E-33	0.00%	0.00%
51	62 of 7166 genes, 0.9%	3.33E-32	0.00%	0.00%
52	62 of 7166 genes, 0.9%	3.33E-32	0.00%	0.00%
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2	200 of 7166 genes, 2.8%	3.65E-31	0.00%	0.00%
3	401 of 7166 genes, 5.6%	8.02E-31	0.00%	0.00%
4	458 of 7166 genes, 6.4%	1.05E-30	0.00%	0.00%
5	478 of 7166 genes, 6.7%	1.17E-30	0.00%	0.00%
6	92 of 7166 genes, 1.3%	2.37E-30	0.00%	0.00%
7	152 of 7166 genes, 2.1%	5.37E-30	0.00%	0.00%
8	79 of 7166 genes, 1.1%	8.48E-30	0.00%	0.00%
9	79 of 7166 genes, 1.1%	8.48E-30	0.00%	0.00%
10	476 of 7166 genes, 6.6%	9.82E-30	0.00%	0.00%
11	155 of 7166 genes, 2.2%	1.23E-29	0.00%	0.00%
12	106 of 7166 genes, 1.5%	5.39E-28	0.00%	0.00%
13	296 of 7166 genes, 4.1%	7.46E-28	0.00%	0.00%
14	98 of 7166 genes, 1.4%	8.01E-28	0.00%	0.00%
15	271 of 7166 genes, 3.8%	1.99E-27	0.00%	0.00%
16	110 of 7166 genes, 1.5%	2.15E-27	0.00%	0.00%
17	102 of 7166 genes, 1.4%	3.47E-27	0.00%	0.00%
18	95 of 7166 genes, 1.3%	7.35E-27	0.00%	0.00%
19	116 of 7166 genes, 1.6%	1.53E-26	0.00%	0.00%
20	97 of 7166 genes, 1.4%	1.54E-26	0.00%	0.00%
21	22 of 7166 genes, 0.3%	8.22E-25	0.00%	0.00%
22	22 of 7166 genes, 0.3%	8.22E-25	0.00%	0.00%
23	97 of 7166 genes, 1.4%	1.03E-23	0.00%	0.00%
24	88 of 7166 genes, 1.2%	1.13E-23	0.00%	0.00%
25	88 of 7166 genes, 1.2%	1.13E-23	0.00%	0.00%
26	2221 of 7166 genes, 31.0%	4.33E-23	0.00%	0.00%
27	4102 of 7166 genes, 57.2%	3.75E-22	0.00%	0.00%
28	100 of 7166 genes, 1.4%	6.35E-22	0.00%	0.00%
29	112 of 7166 genes, 1.6%	1.03E-21	0.00%	0.00%
30	103 of 7166 genes, 1.4%	1.58E-21	0.00%	0.00%
31	3894 of 7166 genes, 54.3%	4.88E-21	0.00%	0.00%
32	271 of 7166 genes, 3.8%	6.06E-20	0.00%	0.00%
33	4049 of 7166 genes, 56.5%	7.35E-20	0.00%	0.00%
34	4286 of 7166 genes, 59.8%	1.22E-19	0.00%	0.00%
35	278 of 7166 genes, 3.9%	1.58E-19	0.00%	0.00%
36	40 of 7166 genes, 0.6%	2.03E-19	0.00%	0.00%
37	201 of 7166 genes, 2.8%	2.35E-19	0.00%	0.00%
38	41 of 7166 genes, 0.6%	3.72E-19	0.00%	0.00%
39	149 of 7166 genes, 2.1%	4.46E-19	0.00%	0.00%
40	400 of 7166 genes, 5.6%	5.44E-19	0.00%	0.00%
41	30 of 7166 genes, 0.4%	6.11E-19	0.00%	0.00%
42	30 of 7166 genes, 0.4%	6.11E-19	0.00%	0.00%
43	30 of 7166 genes, 0.4%	6.11E-19	0.00%	0
44	30 of 7166 genes, 0.4%	6.11E-19	0.00%	0
45	404 of 7166 genes, 5.6%	8.22E-19	0.00%	0
46	31 of 7166 genes, 0.4%	1.33E-18	0.00%	0
47	169 of 7166 genes, 2.4%	1.62E-18	0.00%	0
48	33 of 7166 genes, 0.5%	5.64E-18	0.00%	0
49	33 of 7166 genes, 0.5%	5.64E-18	0.00%	0
50	54 of 7166 genes, 0.8%	7.32E-18	0.00%	0
51	34 of 7166 genes, 0.5%	1.10E-17	0.00%	0
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2	84 of 7166 genes, 1.2%	2.18E-17	0.00%	0
3	13 of 7166 genes, 0.2%	3.19E-17	0.00%	0
4	36 of 7166 genes, 0.5%	3.94E-17	0.00%	0
5	52 of 7166 genes, 0.7%	9.55E-17	0.00%	0
6	100 of 7166 genes, 1.4%	9.60E-17	0.00%	0
7	17 of 7166 genes, 0.2%	1.07E-16	0.00%	0
8	53 of 7166 genes, 0.7%	1.46E-16	0.00%	0
9	62 of 7166 genes, 0.9%	1.82E-16	0.00%	0
10	230 of 7166 genes, 3.2%	2.12E-16	0.00%	0
11	143 of 7166 genes, 2.0%	3.57E-16	0.00%	0
12	18 of 7166 genes, 0.3%	3.80E-16	0.00%	0
13	18 of 7166 genes, 0.3%	3.80E-16	0.00%	0
14	189 of 7166 genes, 2.6%	5.76E-16	0.00%	0
15	468 of 7166 genes, 6.5%	2.15E-15	0.00%	0
16	38 of 7166 genes, 0.5%	5.11E-15	0.00%	0
17	2470 of 7166 genes, 34.5%	7.23E-15	0.00%	0
18	17 of 7166 genes, 0.2%	1.41E-14	0.00%	0
19	43 of 7166 genes, 0.6%	5.57E-14	0.00%	0
20	44 of 7166 genes, 0.6%	8.60E-14	0.00%	0
21	44 of 7166 genes, 0.6%	8.60E-14	0.00%	0
22	44 of 7166 genes, 0.6%	8.60E-14	0.00%	0
23	25 of 7166 genes, 0.3%	2.03E-13	0.00%	0
24	47 of 7166 genes, 0.7%	2.94E-13	0.00%	0
25	235 of 7166 genes, 3.3%	3.00E-13	0.00%	0
26	235 of 7166 genes, 3.3%	3.00E-13	0.00%	0
27	2152 of 7166 genes, 30.0%	1.01E-12	0.00%	0
28	215 of 7166 genes, 3.0%	1.90E-12	0.00%	0
29	74 of 7166 genes, 1.0%	3.23E-12	0.00%	0
30	24 of 7166 genes, 0.3%	5.43E-12	0.00%	0
31	102 of 7166 genes, 1.4%	8.09E-12	0.00%	0
32	5203 of 7166 genes, 72.6%	1.58E-11	0.00%	0
33	2160 of 7166 genes, 30.1%	1.74E-11	0.00%	0
34	2061 of 7166 genes, 28.8%	3.67E-11	0.00%	0
35	326 of 7166 genes, 4.5%	5.68E-11	0.00%	0
36	91 of 7166 genes, 1.3%	1.55E-10	0.00%	0
37	38 of 7166 genes, 0.5%	1.67E-10	0.00%	0
38	38 of 7166 genes, 0.5%	1.67E-10	0.00%	0
39	299 of 7166 genes, 4.2%	2.13E-10	0.00%	0
40	94 of 7166 genes, 1.3%	2.80E-10	0.00%	0
41	40 of 7166 genes, 0.6%	3.58E-10	0.00%	0
42	1204 of 7166 genes, 16.8%	4.31E-10	0.00%	0
43	352 of 7166 genes, 4.9%	4.81E-10	0.00%	0
44	35 of 7166 genes, 0.5%	1.37E-09	0.00%	0
45	35 of 7166 genes, 0.5%	1.37E-09	0.00%	0
46	35 of 7166 genes, 0.5%	1.37E-09	0.00%	0
47	2512 of 7166 genes, 35.1%	2.85E-09	0.00%	0
48	37 of 7166 genes, 0.5%	2.94E-09	0.00%	0
49	23 of 7166 genes, 0.3%	5.86E-09	0.00%	0
50	23 of 7166 genes, 0.3%	5.86E-09	0.00%	0
51	17 of 7166 genes, 0.2%	6.87E-09	0.00%	0
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2	164 of 7166 genes, 2.3%	1.01E-08	0.00%	0
3	41 of 7166 genes, 0.6%	1.16E-08	0.00%	0
4	75 of 7166 genes, 1.0%	1.38E-08	0.00%	0
5	42 of 7166 genes, 0.6%	1.60E-08	0.00%	0
6	2501 of 7166 genes, 34.9%	2.05E-08	0.00%	0
7	44 of 7166 genes, 0.6%	2.95E-08	0.00%	0
8	20 of 7166 genes, 0.3%	4.50E-08	0.00%	0
9	199 of 7166 genes, 2.8%	6.17E-08	0.00%	0
10	58 of 7166 genes, 0.8%	6.78E-08	0.00%	0
11	52 of 7166 genes, 0.7%	2.49E-07	0.00%	0
12	7 of 7166 genes, 0.1%	2.76E-07	0.00%	0
13	7 of 7166 genes, 0.1%	2.76E-07	0.00%	0
14	140 of 7166 genes, 2.0%	2.90E-07	0.00%	0
15	65 of 7166 genes, 0.9%	3.11E-07	0.00%	0
16	53 of 7166 genes, 0.7%	3.17E-07	0.00%	0
17	147 of 7166 genes, 2.1%	6.52E-07	0.00%	0
18	57 of 7166 genes, 0.8%	7.82E-07	0.00%	0
19	8 of 7166 genes, 0.1%	1.08E-06	0.00%	0
20	2469 of 7166 genes, 34.5%	1.77E-06	0.00%	0
21	5 of 7166 genes, 0.1%	1.96E-06	0.00%	0
22	5 of 7166 genes, 0.1%	1.96E-06	0.00%	0
23	14 of 7166 genes, 0.2%	2.46E-06	0.00%	0
24	2819 of 7166 genes, 39.3%	3.88E-06	0.00%	0
25	111 of 7166 genes, 1.5%	4.31E-06	0.00%	0
26	31 of 7166 genes, 0.4%	4.43E-06	0.00%	0
27	31 of 7166 genes, 0.4%	4.43E-06	0.00%	0
28	32 of 7166 genes, 0.4%	6.05E-06	0.00%	0
29	6 of 7166 genes, 0.1%	1.16E-05	0.00%	0
30	6 of 7166 genes, 0.1%	1.16E-05	0.00%	0
31	269 of 7166 genes, 3.8%	1.86E-05	0.00%	0
32	7 of 7166 genes, 0.1%	3.99E-05	0.00%	0
33	3685 of 7166 genes, 51.4%	5.96E-05	0.00%	0
34	102 of 7166 genes, 1.4%	9.06E-05	0.00%	0
35	120 of 7166 genes, 1.7%	9.22E-05	0.00%	0
36	4 of 7166 genes, 0.1%	9.59E-05	0.00%	0
37	4 of 7166 genes, 0.1%	9.59E-05	0.00%	0
38	58 of 7166 genes, 0.8%	0.00014	0.00%	0
39	5 of 7166 genes, 0.1%	0.00047	0.00%	0
40	5 of 7166 genes, 0.1%	0.00047	0.00%	0
41	18 of 7166 genes, 0.3%	0.0006	0.00%	0
42	11 of 7166 genes, 0.2%	0.00082	0.00%	0
43	19 of 7166 genes, 0.3%	0.00086	0.00%	0
44	126 of 7166 genes, 1.8%	0.00107	0.00%	0
45	12 of 7166 genes, 0.2%	0.00138	0.00%	0
46	12 of 7166 genes, 0.2%	0.00138	0.00%	0
47	12 of 7166 genes, 0.2%	0.00138	0.00%	0
48	6 of 7166 genes, 0.1%	0.00139	0.00%	0
49	44 of 7166 genes, 0.6%	0.00152	0.00%	0
50	134 of 7166 genes, 1.9%	0.00214	0.00%	0
51	79 of 7166 genes, 1.1%	0.00268	0.00%	0
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230 of 7166 genes, 3.2%	0.00301	0.00%	0
7 of 7166 genes, 0.1%	0.00319	0.00%	0
7 of 7166 genes, 0.1%	0.00319	0.00%	0
7 of 7166 genes, 0.1%	0.00319	0.00%	0
7 of 7166 genes, 0.1%	0.00319	0.00%	0
7 of 7166 genes, 0.1%	0.00319	0.00%	0
82 of 7166 genes, 1.1%	0.00377	0.00%	0
1350 of 7166 genes, 18.8%	0.00387	0.00%	0
24 of 7166 genes, 0.3%	0.00394	0.00%	0
50 of 7166 genes, 0.7%	0.00414	0.00%	0
3 of 7166 genes, 0.0%	0.00464	0.00%	0
3 of 7166 genes, 0.0%	0.00464	0.00%	0
3 of 7166 genes, 0.0%	0.00464	0.00%	0
15 of 7166 genes, 0.2%	0.00498	0.00%	0
243 of 7166 genes, 3.4%	0.00628	0.00%	0
8 of 7166 genes, 0.1%	0.00628	0.00%	0
27 of 7166 genes, 0.4%	0.00823	0.00%	0
56 of 7166 genes, 0.8%	0.00985	0.00%	0
154 of 7166 genes, 2.1%	0.00987	0.00%	0

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Genes annotated to the term

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 YKR067W, YMR165C, YKL004W, YDF
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 YKR067W, YDR072C, YBR029C, YNL1
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 YGR202C, YNL130C, YGR157W, YJRC
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 YKR067W, YDL052C, YBR029C, YBL0
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 YKL004W, YBR029C, YKL067W, YOR:

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3	YLL043W, YGL084C, YOR245C, YOLO	&
4	YLL043W, YGL084C, YPL189W, YDR:	&
5	YLL043W, YGL084C, YOR245C, YOLO	&
6	YMR165C, YOR245C, YNR008W	&
7	YMR165C, YOR245C, YNR008W	&
8	YMR165C, YOR245C, YNR008W	&
9	YKL004W, YBR029C, YKL067W, YOR:	&
10	YKL004W, YDR072C, YDR367W	&
11	YDR017C, YLR410W, YOR163W	&
12	YKL004W, YDR072C, YOR245C, YNR:	&
13	YGL084C, YKL004W, YDR072C, YOR:	&
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17	YKR067W, YDR503C, YKL004W, YDR	&
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19	YKR067W, YDR503C, YKL004W, YDR	&
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21	YKR067W, YDR072C, YBR029C, YOR:	&
22	YKR067W, YBR029C, YOR245C, YER:	&
23	YKR067W, YKL004W, YDR072C, YBR	&
24	YKR067W, YDR503C, YKL004W, YDR	&
25	YKR067W, YBR252W, YBR029C, YGR	&
26	YKR067W, YDR503C, YKL004W, YDR	&
27	YKR067W, YDR072C, YBR029C, YER:	&
28	YAL044C, YMR189W, YDR019C, YBR	&
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30	YKR067W, YBR029C, YER026C, YBL0	&
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35	YAL044C, YMR189W, YDR019C, YBR	&
36	YAL044C, YMR189W, YDR019C, YFL:	&
37	YAL044C, YOR388C, YMR189W, YDR	&
38	YAL044C, YMR189W, YDR019C	&
39	YAL044C, YMR189W, YDR148C, YDR	&
40	YCL038C, YKL146W, YNL101W	&
41	YAL044C, YOR388C, YMR189W, YDR	&
42	YAL044C, YOR388C, YMR189W, YDR	&
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44	YDR503C, YKL004W, YBR029C, YOR:	&
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7	YGR204W, Q0130, YJL052W, YBL09	&
8	YDR377W, YJR121W, YPL078C, YHR:	&
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24	YDR377W, YJR121W, YPL078C, Q01:	&
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39	YOR317W, YJL052W, YLR044C, YGLC	&
40	YMR220W, YJL167W, YHR007C, YGL	&
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small molecules in orphan reactio

YFH1 : 1 copy

r_1684: choline
r_1746: dihydroxyacetone phosphate
r_1793: formate
r_1795: formate
r_1809: glycerol-3-phosphate
r_1874: L-alanine
r_2056: succinate
r_2057: succinate
r_3537: phosphate
r_3539: CDP
r_3542: CDP-choline
r_3563: 1-phosphatidyl-1D-myo-inositol (1-16:1, 2-16:1)
r_3581: glycerol 3-phosphate
r_3603: H⁺
r_3604: H₂O
r_3650: H⁺
r_3653: carbon dioxide
r_3756: phosphatidate (1-16:1, 2-18:1)
r_3758: phosphatidate (1-18:1, 2-18:1)
r_3781: phosphatidylcholine (1-16:0, 2-16:1)
r_3783: phosphatidylcholine (1-18:0, 2-16:1)
r_3785: phosphatidylcholine (1-16:0, 2-18:1)
r_3787: phosphatidylcholine (1-18:0, 2-18:1)
r_3795: diglyceride (1-18:0, 2-18:1)
r_3811: 1-phosphatidyl-1D-myo-inositol (1-18:0, 2-18:1)
r_3850: phosphatidyl-L-serine (1-16:1, 2-18:1)
r_3852: phosphatidyl-L-serine (1-18:1, 2-18:1)
r_3858: phosphatidylethanolamine (1-16:1, 2-18:1)
r_3860: phosphatidylethanolamine (1-18:1, 2-18:1)
r_3884: phosphatidylcholine (1-18:1, 2-18:1)
r_3910: phosphatidate (1-18:1, 2-18:1)
r_3964: isa 1-phosphatidyl-1D-myo-inositol for PI (1-16:1, 2-16:1)
r_3971: isa ergosterol ester for ergosteryl palmitoleate
r_3976: isa fatty acid for palmitoleate
r_3980: isa phosphatidyl-L-serine for PS (1-16:1, 2-16:1)
r_3989: isa phosphatidylcholine for PC (1-16:1, 2-16:1)
r_3991: isa phosphatidylcholine for PC (1-18:1, 2-16:1)
r_3998: isa phosphatidylethanolamine for PE (1-16:1, 2-16:1)
r_4032: isa triglyceride for TAG (1-16:1, 2-16:1, 3-18:1)

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ns for which there is flux only in:

YFH1 : 2 copies

r_1595: 3-carboxy-4-methyl-2-oxopentanoate
r_2045: serine
r_3554: diglyceride (1-16:0, 2-16:1)
r_3562: 1-phosphatidyl-1D-myo-inositol (1-16:0, 2-16:1)
r_3588: diglyceride (1-16:0, 2-16:1)
r_3662: H₂O
r_3663: phosphate
r_3669: carbon dioxide
r_3685: TAG (1-16:0, 2-16:1, 3-16:0)
r_3765: phosphatidyl-L-serine (1-16:0, 2-16:1)
r_3773: phosphatidylethanolamine (1-16:0, 2-16:1)
r_3789: diglyceride (1-16:0, 2-16:1)
r_3797: phosphatidate (1-16:0, 2-16:1)
r_3805: 1-phosphatidyl-1D-myo-inositol (1-16:0, 2-16:1)
r_3957: H⁺
r_3963: isa 1-phosphatidyl-1D-myo-inositol for PI (1-16:0, 2-16:1)
r_3972: isa ergosterol ester for ergosteryl oleate
r_3975: isa fatty acid for palmitate
r_3979: isa phosphatidyl-L-serine for PS (1-16:0, 2-16:1)
r_3988: isa phosphatidylcholine for PC (1-16:0, 2-16:1)
r_3997: isa phosphatidylethanolamine for PE (1-16:0, 2-16:1)
r_4006: isa triglyceride for TAG (1-16:0, 2-16:1, 3-16:0)

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small molecules in orphan reactions having non-zero flux differences

r_1279: L-leucine
r_1280: 4-methyl-2-oxopentanoate
r_1665: bicarbonate formation
r_1667: bicarbonate formation
r_1669: bicarbonate
r_1672: carbon dioxide
r_1682: cholestenol delta-isomerase
r_1694: carbon dioxide
r_1696: carbon dioxide
r_1697: carbon dioxide
r_1704: cytidylate kinase (dCMP)
r_1754: ergosta-5,6,22,24,(28)-tetraen-3beta-ol
r_1811: glycine
r_1824: H+
r_1829: H+
r_1832: H+
r_1840: hydroxymethylglutaryl-CoA
r_1963: NADP(+)
r_1964: NADPH
r_1965: NH3
r_1977: O2
r_1978: O2
r_1979: O2
r_1992: O2
r_2032: pyrophosphate
r_2053: squalene
r_2054: squalene-2,3-epoxide
r_2093: valine
r_2094: water
r_2096: water
r_2097: water
r_2100: water
r_2125: coenzyme A: cytoplasm to LP
r_3510: palmitate
r_3511: palmitoleate
r_3512: stearate
r_3513: oleate
r_3515: lauroyl-CoA
r_3516: myristoyl-CoA
r_3517: palmitoyl-CoA
r_3518: palmitoleoyl-CoA
r_3519: stearoyl-CoA
r_3520: oleoyl-CoA
r_3523: tetracosanoyl-CoA
r_3524: hexacosanoyl-CoA
r_3525: H+
r_3526: H2O

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- 2 r_3531: O2
- 3 r_3532: NADH transport
- 4 r_3533: NAD transport
- 5 r_3534: glycerol 3-phosphate
- 6 r_3536: diphosphate
- 7 r_3538: CTP
- 8 r_3540: CMP
- 9 r_3543: ATP
- 10 r_3544: AMP
- 11 r_3547: S-adenosyl-L-methionine
- 12 r_3548: S-adenosyl-L-homocysteine
- 13 r_3552: ergosterol
- 14 r_3571: hexadecanoate (n-C16:0)
- 15 r_3572: hexadecenoate (n-C16:1)
- 16 r_3573: octadecanoate (n-C18:0)
- 17 r_3574: octadecenoate (n-C18:1)
- 18 r_3575: lauroyl-CoA
- 19 r_3576: myristoyl-CoA
- 20 r_3577: palmitoyl-CoA
- 21 r_3578: palmitoleoyl-CoA
- 22 r_3579: stearoyl-CoA
- 23 r_3580: oleoyl-CoA
- 24 r_3585: ATP
- 25 r_3586: AMP
- 26 r_3587: diphosphate
- 27 r_3599: tetracosanoyl-CoA
- 28 r_3600: hexacosanoyl-CoA
- 29 r_3681: laurate
- 30 r_3682: myristate
- 31 r_3683: lignoceric acid
- 32 r_3684: cerotic acid
- 33 r_3784: phosphatidylcholine (1-18:1, 2-16:1)
- 34 r_3788: phosphatidylcholine (1-18:1, 2-18:1)
- 35 r_3939: ergosterol
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Table S6. Fe-S cluster containing proteins in *Saccharomyces cerevisiae*

ORF	Gene	Compartment	# of Fe-S clusters	Type of Fe-S cluster	Reference
YNL240c	<i>NAR1</i>	Cytosol	2	4Fe-4S, 4Fe-4S	(1)
YGL091c	<i>NBP35</i>	Cytosol	2	4Fe-4S, 4Fe-4S	(2)
YGL009c	<i>LEU1</i>	Cytosol	1	4Fe-4S	(3)
YJR137c	<i>ECM17^a</i>	Cytosol	1	4Fe-4S	(3)
YPL086c	<i>ELP3^a</i>	Cytosol	1	4Fe-4S	(3)
YPL207w	<i>TYW1^a</i>	Cytosol	1	4Fe-4S	(4)
YDR091c	<i>RLI1^a</i>	Cytosol	2	4Fe-4S, 4Fe-4S	(3)
YDR091c	<i>RLI1^a</i>	Nucleus	2	4Fe-4S, 4Fe-4S	(3)
YER171w	<i>RAD3^a</i>	Nucleus	1	4Fe-4S	(5)
YOL043c	<i>NTG2^a</i>	Nucleus	1	4Fe-4S	(3)
YKL045w	<i>PRI2</i>	Nucleus	1	4Fe-4S	(6)
YLL041c	<i>SDH2</i>	Mitochondrion	3	2Fe-2S, 4Fe-4S, 3Fe-4S	(3)
YEL024w	<i>RIP1</i>	Mitochondrion	1	2Fe-2S	(3)
YLR304c	<i>ACO1</i>	Mitochondrion	1	4Fe-4S	(3)
YDR234w	<i>LYS4</i>	Mitochondrion	1	4Fe-4S	(3)
YJR016c	<i>ILV3</i>	Mitochondrion	1	4Fe-4S	(3)
YPL252c	<i>YAH1</i>	Mitochondrion	1	2Fe-2S	(3)
YOR196c	<i>LIP5^a</i>	Mitochondrion	2	4Fe-4S, 4Fe-4S	(3)
YGR286c	<i>BIO2</i>	Mitochondrion	2	2Fe-2S, 4Fe-4S	(3)
YDL171c	<i>GLT1</i>	Mitochondrion	1	4Fe-4S	(3)

^a Not employed in Yeast7.6.

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Table S7. Iron family cofactors in the **existing** metabolic network model (Y7.6) of yeast

Activity	Reaction ID in Y7.6	M / A ^a	Enzyme/Complex	Cofactor	Cofactors enzyme ⁻¹
C-4 methyl sterol oxidase	r_0238 r_0239 r_0240 r_0241	M	Erg25p	iron III ^b	2
C-5 sterol desaturase	r_0242	M	Erg3p	iron III ^b	2
ribonucleotide reductase	r_0974 r_0975 r_0976 r_0977 r_0978 r_0979	M	Rnr1p Rnr2p Rnr3p Rnr4p	iron III ^b	2
sphinganine C4-hydroxylase	r_0259 r_0261 r_0922	M	Sur2p ^c	iron III haem a	1 1
sphingolipid alpha-hydroxylase	r_0260 r_0262 r_0267 r_0268 r_0269 r_0270	M	Scs7p ^c	iron III haem a	1 1
delta(9) fatty acid desaturase	r_2182 r_2183	M	Ole1p ^c	iron III haem a	1 1
multi-copper oxidase	r_1288	A	Fet3p	copper I	4
multi-copper oxidase	r_1305	A	Fet5p	copper I	4
ferrocytochrome-c: O-oxidoreductase	r_0439	M	Mitochondrial Respiratory Chain Complex III	copper I haem c ferrohaem b	1 2 2
cytochrome c, isoforms 1 and 2	r_0001 r_0002 r_0004 r_0437	M	Cyc1p Cyc7p	haem a	1
C-22 sterol desaturase	r_0233	M	Erg5p	haem a	1
cytosolic catalase T	r_0255	M	Ctt1p	haem a	1
catalase A	r_0256	M	Cta1p	haem a	1
lanosterol 14-alpha-demethylase	r_0317	M	Erg11p	haem a	1
ferrocytochrome-c: O-oxidoreductase	r_0438	M	Mitochondrial Respiratory Chain Complex IV	haem a	2
L-tryptophan: oxygen 2,3-oxidoreductase	r_0694	M	Bna2p	haem a	1
N-formyltyrosine oxidase	r_0763 r_0920	M	Dit2p	haem a	1
ferric and cupric reductases	r_1284	A	Fre1p Fre2p	haem a	1
ferric reductase	r_1296	A	Fre6p	haem a	1
ferric reductase	r_1302	A	Fre5p	haem a	1
ferric reductase	r_1334 r_1337 r_1340 r_1343 r_1346	A	Fre1p Fre2p Fre3p Fre4p	haem a	1
sulphite reductase	r_1027	M	Met5p Met10p	sirohaem	1
cytochrome b2	r_0004	M	Cyb2p	ferrohaem b	1
cytochrome c peroxidase	r_0437	M	Ccp1p	ferrohaem b	1
succinate dehydrogenase	r_1021	M	Mitochondrial Respiratory Chain Complex II	ferrohaem b	1
5-aminolevulinate synthase	r_0081	M	Hem1p	pyridoxine	1
2-isopropylmalate hydratase	r_0023 r_0060	M	Leu1p	4Fe-4S	1
2-methylcitrate dehydratase	r_0027 r_0542	M	Lys4p	4Fe-4S	1
aconitate hydratase	r_0280 r_0302 r_2305	M	Aco1p	4Fe-4S	1
dihydroxy-acid dehydratase	r_0352	M	Ilv3p	4Fe-4S	1
glutamate synthase	r_0472 r_0761	M	Glt1p	4Fe-4S	1
sulphite reductase	r_1027	M	Met5p	4Fe-4S	1
CIA related Fe/S	r_1374 r_1375	A	Nbp35p	4Fe-4S 4Fe-	2

maturation				4S	
CIA related Fe/S maturation	r_1376 r_1377	A	Nar1p	4Fe-4S 4Fe-4S	2
succinate dehydrogenase	r_1021	M	Sdh2p (Mitochondrial Respiratory Chain Complex II)	2Fe-2S 4Fe-4S 3Fe-4S	3
biotin synthase	r_0229	M	Bio2p	2Fe-2S 4Fe-4S	2
ferrocytochrome-c: O-oxidoreductase	r_0439	M	Rip1p (Mitochondrial Respiratory Chain Complex III)	2Fe-2S	1
ISC machinery for Fe/S biogenesis, haem O monooxygenase	r_0530 r_1349 r_1350	M + A	Yah1p	2Fe-2S	1

^a M: modified, A: added

^b Erg3p and Erg25p were both reported to incorporate oxo-diiron (Fe-O-Fe) species (1, 2), so were the ribonucleotide reductases Rnr1-4p (3). Oxo-diiron species were reported to carry FeIII charge (4).

^c These enzymes are accepted as oxo-diiron enzymes of the fatty acid hydroxylase/sterol desaturase family, and are also referred to as a specific subgroup as heme/diiron enzymes (2).

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3. Hohenberger J, Ray K, Meyer K. 2012. The biology and chemistry of high-valent iron–oxo and iron–nitrido complexes. *Nat Commun* 3:720.
4. Kurtz DM. 1990. Oxo- and hydroxo-bridged diiron complexes: a chemical perspective on a biological unit. *Chem Rev* 90:585–606.

Table S8 Excluded protein - iron family cofactor associations

Activity	Enzyme	Reason for exclusion	Cofactor	Cofactors enzyme ⁻¹
glutaredoxin 5	Grx5p	does not constitute holo cluster	2Fe-2S	1
scaffold protein	Isu1p	does not constitute holo cluster	2Fe-2S	1
scaffold protein	Isu2p	does not constitute holo cluster	2Fe-2S	1
bifunctional dehydrogenase and ferrochelatase	Met8p	conflicting data: involved in cytosolic sirohaem biosynthesis but reported to employ mitochondrial 2Fe-2S cluster	2Fe-2S	1
aconitase	Aco2p	absent from Y7.6	4Fe-4S	1
elongator complex protein 3	Elp3p	non-metabolic, absent from Y7.6	4Fe-4S	1
scaffold protein	Nfu1p	does not constitute holo cluster	4Fe-4S	1
DNA glycosylase	Ntg2p	non-metabolic, absent from Y7.6	4Fe-4S	1
DNA replication	Pri2p	non-metabolic, absent from Y7.6	4Fe-4S	1
DNA helicase	Rad3p	non-metabolic, absent from Y7.6	4Fe-4S	1
tRNA wybutosine-synthesising protein 1	Tyw1p	non-metabolic, absent from Y7.6	4Fe-4S	1
lipoate synthase	Lip5p	absent from Y7.6	4Fe-4S 4Fe-4S	2
Rnase L inhibitor protein 1	Rli1p	non-metabolic, absent from Y7.6	4Fe-4S 4Fe-4S	2
cytochrome b5	Cyb5p	absent from Y7.6	haem a	1
cytochrome c haem lyase	Cyc3p	absent from Y7.6	haem a	1
cytochrome c1 haem lyase	Cyt2p	absent from Y7.6	haem a	1
transcription factor with haem-dependent DNA-binding activity	Hap1p	regulatory component, absent from Y7.6	haem a	1
putative protein of unknown function	Irc21p	only documented from metal binding motif similarity	haem a	1
copper chaperone for Sod1p	Ccs1p	copper metabolism absent from Y7.6	copper I	1
cytochrome c oxidase subunit I	Cox1p	COX metallation not included in Y7.6	copper I	1
cytochrome c oxidase subunit II	Cox2p	COX metallation not included in Y7.6	copper I	1
copper chaperone	Cox17p	COX metallation not included in Y7.6	copper I	1
metallothionein	Cup1-1p	copper metabolism absent from Y7.6	copper I	1
metallothionein	Cup1-2p	copper metabolism absent from Y7.6	copper I	1
copper binding transcription factor	Cup2p	regulatory component, absent from Y7.6	copper I	1
Cup2p homolog transcriptional activator	Haa1p	regulatory component, absent from Y7.6	copper I	1
copper sensing transcription factor	Mac1p	regulatory component, absent from Y7.6	copper I	1
copper-transporting	Pca1p	copper metabolism absent from Y7.6	copper I	1

ATPase				
copper-zinc superoxide dismutase	Sod1p	copper metabolism absent from Y7.6	copper I	1
protein serine/threonine phosphatase	Glc7p	regulatory component, absent from Y7.6, UniProt only Mg/Mn evidence	Mg/Mn	2
protein serine/threonine phosphatase	Pph21p	regulatory component, absent from Y7.6, UniProt only Mg/Mn evidence	Mg/Mn	2
protein serine/threonine phosphatase	Pph22p	regulatory component, absent from Y7.6, UniProt only Mg/Mn evidence	Mg/Mn	2
protein serine/threonine phosphatase	Pph3p	regulatory component, absent from Y7.6, UniProt only Mg/Mn evidence	Mg/Mn	2
protein serine/threonine phosphatase	Ppt1p	regulatory component, absent from Y7.6, UniProt only Mg/Mn evidence	Mg/Mn	2
protein serine/threonine phosphatase	Ppz1p	regulatory component, absent from Y7.6, UniProt only Mg/Mn evidence	Mg/Mn	2
protein serine/threonine phosphatase	Ppz2p	regulatory component, absent from Y7.6, UniProt only Mg/Mn evidence	Mg/Mn	2
protein serine/threonine phosphatase	Sit4p	regulatory component, absent from Y7.6, UniProt only Mg/Mn evidence	Mg/Mn	2
protein serine/threonine phosphatase	Ppq1p	regulatory component, absent from Y7.6, UniProt only Mg/Mn evidence	Mg/Mn	2
protein serine/threonine phosphatase	Ppg1p	regulatory component, absent from Y7.6, UniProt only Mg/Mn evidence	Mg/Mn	2
nitric oxide oxidoreductase	Yhb1p	absent from Y7.6	ferrohaem b	1

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2 access to Saccharomyces Genome Database and UniProt on 01/08/2018
3 iron ion binding GO:0005506 from SGD included as Fe-binding in Y7.Fe Y/N?
4 NBP35 Y
5 ISA1 N
6 ISA2 N
7 GRX6
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2				
3	note	in Y7.Fe Y/N?	UniProt	included as Fe-binding in Y7.Fe Y/N?
4		Y	COX1	Y
5	Fe-binding function described iY		COB	Y
6	Fe-binding function described iY		GAL7	N
7		N	GLT1	Y
8		N	GRX3	Y
9		N	SDH4	Y
10			LYS4	Y
11			CTA1	Y
12			DIT2	Y
13			RIP1	Y
14			CYC7	Y
15			GRX4	Y
16			LEU1	Y
17			CTT1	Y
18			BIO2	Y
19			ERG11	Y
20			RNR2	Y
21			ILV3	Y
22			BNA1	N
23			CYC1	Y
24			BNA2	Y
25			MET5	Y
26			SDH3	Y
27			CCP1	Y
28			SDH2	Y
29			JLP1	N
30			ACO1	Y
31			CYB2	Y
32			ADI1	N
33			ERG5	Y
34			SCS7	Y
35			CYT1	Y
36			CAT5	N
37			GRX5	N
38			YAH1	Y
39			OLE1	Y
40			FRE1	Y
41			FRE2	Y
42			FRE6	Y
43			FRE5	Y
44			FRE3	Y
45			FRE4	Y
46			NFS1	N
47			ISA1	N
48			ISA2	N
49			CFD1	Y
50			NBP35	Y
51			DRE2	Y
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John Wiley & Sons

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1					
2					
3	note	in Y7.Fe Y/N?		Fe-binding proteins in Y7.Fe	in UniProt `
4		Y		ACO1	Y
5		Y		ARH1	N
6	Manual assertion inferred from sequ	Y		BIO2	Y
7		Y		BNA2	Y
8		Y		CCP1	Y
9		Y		CFD1	Y
10		Y		CIA1	N
11		Y		CIA2	N
12		Y		COB	Y
13		Y		COX1	Y
14		Y		CTA1	Y
15		Y		CTT1	Y
16		Y		CYB2	Y
17		Y		CYC1	Y
18		Y		CYC7	Y
19		Y		CYT1	Y
20		Y		DIT2	Y
21		Y		DRE2	Y
22		Y		ERG11	Y
23	Inferred from electronic annotation	Y		ERG25	N
24		Y		ERG3	N
25		Y		ERG5	Y
26		Y		FET3	N
27		Y		FET5	N
28		Y		FIT1	N
29	Manual assertion inferred from sequ	Y		FIT2	N
30		Y		FIT3	N
31		Y		FRE1	Y
32	Can also use other divalent metal cat	Y		FRE2	Y
33		Y		FRE3	Y
34		Y		FRE4	Y
35		Y		FRE5	Y
36	Inferred from electronic annotation	Y		FRE6	Y
37	Manual assertion inferred from sequ	Y		GLT1	Y
38		Y		GRX3	Y
39		Y		GRX4	Y
40		Y		HEM1	N
41		Y		ILV3	Y
42		Y		ISU1	N
43		Y		ISU2	N
44		Y		LEU1	Y
45		Y		LYS4	Y
46	Manual assertion inferred from sequ	Y		MAS1	N
47	Manual assertion inferred from sequ	Y		MET10	N
48	Manual assertion inferred from sequ	Y		MET18	N
49		Y		MET5	Y
50		Y		MTC3	N
51		Y		NAR1	Y
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2	Y		NBP35	Y
3	N		NFU1	N
4	N		OLE1	Y
5	N		RIP1	Y
6	N		RNR1	N
7	N		RNR2	Y
8	N		RNR3	N
9	N		RNR4	N
10	N		SCS7	Y
11	N		SDH2	Y
12	N		SDH3	Y
13	N		SDH4	Y
14	N		SUR2	N
15	N		TAH18	N
16	N		YAH1	Y
17	N		YFH1	N
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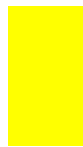
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3	in GO:0005506	Y7.Fe enzymes		Y7.Fe reaction-enzyme association			
4	N	e_0001 COX1		r_0001 e_0151 e_0268 e_0255			
5	N	e_0002 ATP8		r_0002 e_0152 e_0532 e_0256			
6	N	e_0003 ATP6		r_0003 e_0015			
7	N	e_0004 COB		r_0004 e_0704 e_0531 e_0255			
8	N	e_0005 OLI1		r_0005 e_0682 e_0364			
9	N	e_0006 COX2		r_0006 e_0973 e_0379			
10	N	e_0007 COX3		r_0007 e_0465			
11	N	e_0008 CYS3		r_0012 e_0431			
12	N	e_0009 FUN26		r_0013 e_0254 e_0721			
13	N	e_0010 PMT2		r_0014 e_0832			
14	N	e_0011 CDC19		r_0015 e_0071			
15	N	e_0012 GCV3		r_0016 e_0100 e_0734			
16	N	e_0013 ACS1		r_0017 e_0794			
17	N	e_0014 ACS1		r_0018 e_0348 e_0496 e_0980			
18	N	e_0015 BDH1		r_0019 e_0437			
19	N	e_0016 GDH3		r_0020 e_0170			
20	N	e_0017 ADE1		r_0021 e_0191 e_0339 e_0406			
21	N	e_0018 YAT1		r_0022 e_0191 e_0339 e_0406			
22	N	e_0019 PHO11		r_0023 e_0328			
23	N	e_0021 FMT1		r_0024 e_0778 e_0855			
24	N	e_0023 ACH1		r_0025 e_0779			
25	N	e_0024 PET9		r_0027 e_0196			
26	N	e_0025 RIB1		r_0028 e_0947			
27	N	e_0026 URA7		r_0029 e_0550			
28	N	e_0027 FUI1		r_0030 e_0457			
29	N	e_0028 COR1		r_0032 e_0830			
30	N	e_0029 PRX1		r_0033 e_0354 e_0897			
31	N	e_0030 PRS4		r_0034 e_0897			
32	N	e_0031 ILS1		r_0035 e_0897			
33	N	e_0032 BNA4		r_0036 e_0897			
34	N	e_0033 ATP1		r_0037 e_0897			
35	N	e_0034 RER2		r_0038 e_0237			
36	N	e_0035 COQ1		r_0039 e_0182			
37	N	e_0036 GPI18		r_0040 e_0182			
38	N	e_0037 UGA2		r_0041 e_0092			
39	N	e_0038 IPP1		r_0042 e_0088			
40	N	e_0039 GAL7		r_0042 e_0169			
41	N	e_0040 GAL10		r_0045 e_0663			
42	N	e_0041 GAL1		r_0057 e_0598			
43	N	e_0042 FUR4		r_0058 e_0530			
44	N	e_0043 CHS3		r_0059 e_0305			
45	N	e_0044 ETR1		r_0060 e_0328			
46	N	e_0047 HMT1		r_0061 e_0101			
47	N	e_0048 PDX3		r_0062 e_0370 e_0636 e_0647			
48	N	e_0049 CSG2		r_0063 e_0075			
49	N	e_0050 CHS2		r_0064 e_0138 e_0370 e_0636			
50	N	e_0051 ATP3		r_0065 e_0182			
51	N	e_0054 TSC3		r_0066 e_0810			
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2	Y		e_0055	BAP2	r_0067	e_0759	
3	N		e_0056	TAT1	r_0068	e_0361	
4	N		e_0057	MIS1	r_0069	e_0122	
5	N		e_0058	AAC3	r_0072	e_0138	
6	N		e_0059	PHO3	r_0073	e_0691	e_0866
7	N		e_0060	PHO5	r_0074	e_0166	
8	N		e_0061	ALG1	r_0075	e_0627	
9	N		e_0062	LYS2	r_0076	e_0350	e_1053
10	N		e_0063	TKL2	r_0077	e_0865	
11	N		e_0064	GRS1	r_0078	e_0350	e_1053
12	N		e_0065	TPS1	r_0079	e_0368	
13	N		e_0066	VMA2	r_0080	e_0340	e_0903
14	N		e_0067	VMA2	r_0081	e_0195	
15	N		e_0068	AGP2	r_0082	e_0866	
16	N		e_0069	ADH5	r_0083	e_0166	
17	N		e_0070	ARA1	r_0084	e_0307	
18	N		e_0071	RIB7	r_0085	e_0298	
19			e_0073	CSH1	r_0088	e_0691	
20			e_0074	TYR1	r_0089	e_0691	
21			e_0075	ECM31	r_0090	e_0474	e_0839
22			e_0076	DTR1	r_0091	e_0404	e_0453
23			e_0077	YPC1	r_0091		
24			e_0078	RIM2	r_0092	e_0691	e_0866
25			e_0079	PGI1	r_0093	e_0166	
26			e_0080	KTR4	r_0095	e_0370	e_0636 e_0647
27			e_0081	KTR3	r_0096	e_0685	
28			e_0082	DUR1,2	r_0097	e_0100	e_0734
29			e_0083	MET8	r_0100	e_0481	
30			e_0084	PYC2	r_0101	e_0481	
31			e_0085	PDB1	r_0102	e_0481	
32			e_0086	GPX2	r_0103	e_0904	
33			e_0087	HIS7	r_0104	e_0905	
34			e_0088	ARO4	r_0105	e_0481	
35			e_0089	DUT1	r_0106	e_0481	
36			e_0090	RIB5	r_0107	e_0481	
37			e_0091	SHM1	r_0108	e_0744	
38			e_0092	TSC10	r_0109	e_0147	e_0808
39			e_0093	CTP1	r_0111	e_0023	
40			e_0094	VBA2	r_0112	e_0013	e_0651
41			e_0095	SUL1	r_0113	e_0014	
42			e_0096	PHO89	r_0114	e_0652	
43			e_0097	MAL31	r_0115	e_0290	
44			e_0098	MAL32	r_0116	e_0019	e_0060
45			e_0100	ILV6	r_0117	e_0948	
46			e_0101	LEU2	r_0118	e_0840	
47			e_0102	AGP1	r_0119	e_0925	
48			e_0103	HIS4	r_0120	e_0349	
49			e_0104	GRX1	r_0121	e_0349	
50			e_0105	ATG22	r_0122	e_0349	
51			e_0106	GLK1	r_0123	e_0349	
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2		e_0107	APA1	r_0124	e_0349	
3		e_0108	PBN1	r_0125	e_0349	
4		e_0109	CHA1	r_0126	e_1010	
5		e_0110	VBA3	r_0127	e_1009	e_1010
6		e_0111	CIT2	r_0128	e_1010	
7		e_0112	ADY2	r_0129	e_1010	
8		e_0113	PGK1	r_0130	e_1010	
9		e_0114	SLM5	r_0131	e_1010	
10		e_0115	PMP1	r_0132	e_1009	e_1010
11		e_0116	FEN2	r_0133	e_1010	
12		e_0119	RBK1	r_0134	e_1010	
13		e_0120	PHO87	r_0135	e_1010	
14		e_0122	THR4	r_0137	e_0500	
15		e_0123	ERS1	r_0138	e_0786	
16		e_0124	TRX3	r_0139	e_0700	
17		e_0125	GIT1	r_0140	e_0786	
18		e_0126	ADH7	r_0142	e_0541	
19		e_0127	ATP16	r_0143	e_0701	
20		e_0129	GPD1	r_0144	e_0280	
21		e_0130	SIR2	r_0145	e_0824	
22		e_0131	FAD1	r_0146	e_0816	
23		e_0133	SLC1	r_0147	e_0491	
24		e_0134	PSA1	r_0148	e_0194	
25		e_0135	IDP1	r_0149	e_0303	
26		e_0136	COX9	r_0150	e_0303	
27		e_0137	MDH3	r_0151	e_0686	
28		e_0138	THI3	r_0152	e_0686	
29		e_0139	NDE2	r_0153	e_0791	
30		e_0140	RAM1	r_0154	e_0556	
31		e_0141	PMT5	r_0155	e_0403	
32		e_0142	PMT1	r_0156	e_0313	
33		e_0143	GET3	r_0157	e_0894	
34		e_0144	QRI1	r_0158	e_0386	e_0900
35		e_0145	LYS21	r_0159	e_0386	e_0900
36		e_0146	LYS21	r_0160	e_0386	e_0900
37		e_0147	BPL1	r_0161	e_0386	e_0900
38		e_0149	SFA1	r_0162	e_0386	e_0900
39		e_0150	GLT1	r_0163	e_0764	
40		e_0151	DLD1	r_0164	e_0221	e_0447
41		e_0152	DLD2	r_0165	e_0356	e_0730
42		e_0153	LYS20	r_0166	e_0069	e_0149 e_0834
43		e_0154	LYS20	r_0167	e_0356	e_0730
44		e_0155	VMA1	r_0168	e_0126	e_0221 e_0766
45		e_0156	VMA1	r_0169	e_0069	e_0149 e_0834
46		e_0157	GGC1	r_0170	e_0356	e_0730
47		e_0158	HEM3	r_0171	e_0126	e_0766
48		e_0159	UGA4	r_0172	e_0739	e_0740
49		e_0160	GDH2	r_0173	e_0911	
50		e_0161	GUD1	r_0174	e_0898	
51		e_0162	HXT15	r_0175	e_0293	e_0898
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e_0163	MPH2	r_0176	e_0898		
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e_0165	TRP1	r_0178	e_0293	e_0898	
e_0166	KCS1	r_0179	e_0069	e_0149	e_0834
e_0167	GCV1	r_0180	e_0356	e_0730	
e_0168	SES1	r_0181	e_0126	e_0766	
e_0169	ARO3	r_0182	e_0069	e_0149	e_0834
e_0170	ARO3	r_0183	e_0356	e_0730	
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e_0172	HEM13	r_0185	e_0739	e_0740	
e_0173	BAP3	r_0186	e_0069	e_0149	e_0834
e_0174	HEM12	r_0187	e_0356	e_0730	
e_0175	TPI1	r_0188	e_0235		
e_0177	LCB2	r_0189	e_0486		
e_0179	TPS2	r_0190	e_0484		
e_0181	GRX3	r_0191	e_0082		
e_0182	ARO1	r_0192	e_0080	e_0081	e_0236
e_0183	YCF1	r_0193	e_0952		
e_0184	EKI1	r_0194	e_0164		
e_0185	KGD2	r_0195	e_0065	e_0179	e_0711
e_0186	HOM2	r_0198	e_0098	e_0414	e_0416
e_0187	ARG82	r_0199	e_0760		
e_0188	SDH4	r_0201	e_0898		
e_0189	HST4	r_0202	e_0219		
e_0190	CAB5	r_0203	e_0297	e_0591	
e_0191	COQ4	r_0204	e_0210		
e_0192	MSS4	r_0205	e_0447		
e_0193	MSS4	r_0206	e_0921		
e_0194	ADK1	r_0207	e_0426		
e_0195	HEM1	r_0208	e_0826		
e_0196	LYS4	r_0209	e_0214		
e_0197	FMN1	r_0210	e_0443		
e_0198	FMN1	r_0211	e_0376	e_0970	
e_0199	CTA1	r_0212	e_0427		
e_0200	EXG2	r_0213	e_0114		
e_0201	MSW1	r_0214	e_0508		
e_0202	GLO2	r_0215	e_0281		
e_0204	INM2	r_0216	e_0629		
e_0205	DPL1	r_0217	e_0574		
e_0206	SUR2	r_0218	e_0630		
e_0207	ATP5	r_0219	e_0186		
e_0208	PRO1	r_0220	e_0615		
e_0209	GPI11	r_0221	e_0919		
e_0210	HNT2	r_0222	e_0244		
e_0211	IPK1	r_0223	e_0107		
e_0212	ASP1	r_0224	e_0107		
e_0213	TIM11	r_0225	e_0283		
e_0214	YDR341C	r_0226	e_0002	e_0003	e_0005
e_0215	HXT7	r_0227	e_0115	e_0248	e_0270
e_0216	HXT6	r_0228	e_0061		

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2		e_0217	HXT3	r_0229	e_0413		
3		e_0218	TRR1	r_0230	e_0147		
4		e_0219	TRP4	r_0231	e_0800		
5		e_0221	YPR1	r_0233	e_0724		
6		e_0222	ARH1	r_0234	e_0326		
7		e_0223	ATP17	r_0235	e_0326		
8		e_0224	ARO10	r_0236	e_0644		
9		e_0225	ATO3	r_0237	e_0644		
10		e_0226	HPT1	r_0238	e_0367		
11		e_0227	URH1	r_0239	e_0367		
12		e_0228	DIT2	r_0240	e_0367		
13		e_0229	DIT2	r_0241	e_0367		
14		e_0230	DIT1	r_0242	e_0637		
15		e_0231	ADE8	r_0243	e_0742		
16		e_0232	BNA7	r_0244	e_0329		
17		e_0233	TSA2	r_0249	e_0140	e_0560	
18		e_0234	GUK1	r_0250	e_0508	e_0542	e_0888
19		e_0235	PHO8	r_0252	e_0018	e_0277	
20		e_0236	KRE2	r_0253	e_0703		
21		e_0237	RIB3	r_0254	e_0702		
22		e_0238	ITR1	r_0255	e_0371		
23		e_0239	SAM2	r_0256	e_0199		
24		e_0241	GNP1	r_0259	e_0206		
25		e_0242	GRX2	r_0260	e_0756		
26		e_0243	QCR7	r_0261	e_0206		
27		e_0244	APA2	r_0262	e_0756		
28		e_0245	CAB1	r_0263	e_0417	e_0558	e_0762
29		e_0246	STL1	r_0264	e_0417	e_0558	e_0762
30		e_0247	YEA6	r_0265	e_0417	e_0558	e_0762
31		e_0248	PMP2	r_0266	e_0417	e_0558	e_0762
32		e_0249	URA3	r_0267	e_0756		
33		e_0250	RIP1	r_0268	e_0756		
34		e_0251	VMA3	r_0269	e_0756		
35		e_0252	VMA3	r_0270	e_0756		
36		e_0253	BUD16	r_0271	e_0678	e_0679	
37		e_0254	UTR4	r_0272	e_0043	e_0050	e_0789
38		e_0255	CYC7	r_0273	e_0646		
39		e_0256	CYC7	r_0274	e_0395		
40		e_0257	YEF1	r_0278	e_0959		
41		e_0258	YEF1	r_0279	e_0342		
42		e_0259	GDA1	r_0280	e_0676		
43		e_0260	GLY1	r_0281	e_0034	e_0732	
44		e_0261	FRD1	r_0282	e_0034	e_0732	
45		e_0262	FRD1	r_0283	e_0034	e_0732	
46		e_0263	VMA8	r_0284	e_0034	e_0732	
47		e_0264	VMA8	r_0285	e_0034	e_0732	
48		e_0265	PCM1	r_0286	e_0034	e_0732	
49		e_0266	CAN1	r_0287	e_0034	e_0732	
50		e_0267	HXT13	r_0288	e_0034	e_0732	
51		e_0268	DLD3	r_0289	e_0034	e_0732	
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e_0269	PMI40	r_0290	e_0034	e_0732
e_0270	YND1	r_0291	e_0034	e_0732
e_0271	YND1	r_0292	e_0034	e_0732
e_0272	HEM14	r_0293	e_0034	e_0732
e_0273	FAA2	r_0294	e_0034	e_0732
e_0274	ISC1	r_0295	e_0034	e_0732
e_0275	ISC1	r_0296	e_0034	e_0732
e_0276	PRO3	r_0297	e_0034	e_0732
e_0277	YAT2	r_0298	e_0034	e_0732
e_0280	SAH1	r_0299	e_0034	e_0732
e_0281	HOM3	r_0300	e_0805	e_0947
e_0282	PIC2	r_0301	e_0111	
e_0283	HIS1	r_0302	e_0676	
e_0284	FCY2	r_0303	e_0675	
e_0285	FCY21	r_0304	e_0172	
e_0286	FCY22	r_0306	e_0026	e_0540
e_0287	CEM1	r_0307	e_0026	e_0540
e_0288	HOR2	r_0308	e_0344	
e_0289	ICL1	r_0309	e_0380	
e_0290	ARG5,6	r_0310	e_0008	
e_0291	RNR1	r_0311	e_0545	
e_0292	RNR1	r_0312	e_0674	
e_0293	ALD5	r_0313	e_0793	
e_0294	SER3	r_0314	e_0666	
e_0295	ILV1	r_0315	e_0806	
e_0297	TRP2	r_0317	e_0424	e_0434
e_0298	MET6	r_0318	e_0960	
e_0299	PRS2	r_0319	e_0710	
e_0300	AVT6	r_0320	e_0726	
e_0301	COX15	r_0321	e_0070	
e_0303	ADK2	r_0322	e_0567	
e_0304	GRX4	r_0323	e_0554	
e_0305	TMT1	r_0326	e_0452	
e_0306	PDA1	r_0327	e_0452	
e_0307	FAU1	r_0328	e_0786	
e_0308	DEG1	r_0329	e_0666	
e_0309	HXT10	r_0330	e_0234	
e_0310	GNA1	r_0331	e_0439	
e_0311	LPD1	r_0332	e_0119	
e_0312	FRS2	r_0334	e_0190	
e_0313	AGX1	r_0335	e_0815	
e_0314	SEC53	r_0340	e_0914	
e_0315	DAK2	r_0341	e_0914	
e_0316	AGP3	r_0342	e_0914	
e_0317	GSY1	r_0343	e_0914	
e_0320	HIS2	r_0344	e_0880	
e_0321	MET10	r_0345	e_0881	
e_0322	QCR6	r_0346	e_0735	
e_0323	BNA6	r_0347	e_0794	
e_0324	BNA6	r_0348	e_0143	

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2		e_0325	HXK1	r_0349	e_0692		
3		e_0326	ERG26	r_0350	e_0794		
4		e_0327	PMA1	r_0351	e_0794		
5		e_0328	LEU1	r_0352	e_0528		
6		e_0329	ERG4	r_0353	e_0528		
7		e_0330	TRP5	r_0354	e_0315	e_0707	
8		e_0331	PNC1	r_0355	e_0515		
9		e_0332	HEM2	r_0356	e_0582		
10		e_0334	PYC1	r_0357	e_0866		
11		e_0335	PUS2	r_0358	e_0166		
12		e_0336	NPY1	r_0359	e_0657		
13		e_0337	HNH1	r_0360	e_0723		
14		e_0338	GUP1	r_0361	e_0976		
15		e_0339	COQ8	r_0362	e_0010	e_0141	e_0142
16		e_0340	MET13	r_0363	e_0535		
17		e_0341	GPI10	r_0364	e_0089		
18		e_0342	ARO2	r_0365	e_0552		
19		e_0343	LYS5	r_0366	e_0405	e_0454	
20		e_0344	STR3	r_0368	e_0184	e_0646	
21		e_0345	TPN1	r_0369	e_0859		
22		e_0346	COX4	r_0370	e_0200	e_0412	e_0673
23		e_0347	COX13	r_0373	e_0912		
24		e_0348	ARO8	r_0399	e_0273		
25		e_0349	POX1	r_0400	e_0273		
26		e_0350	SDT1	r_0402	e_0273		
27		e_0351	VRG4	r_0410	e_0273		
28		e_0352	ADE5,7	r_0412	e_0273		
29		e_0353	GUS1	r_0436	e_0870		
30		e_0354	PDE1	r_0437	e_0256	e_0532	e_0605
31		e_0355	HXK2	r_0438	e_0001	e_0006	e_0007
32		e_0356	ADH4	r_0439	e_0004	e_0028	e_0243
33		e_0357	ECT1	r_0440	e_0131		
34		e_0358	NMA2	r_0441	e_0626		
35		e_0359	NMA2	r_0442	e_0626		
36		e_0361	UGA1	r_0443	e_0149		
37		e_0362	VMA7	r_0445	e_0901		
38		e_0363	VMA7	r_0446	e_0396		
39		e_0364	GSC2	r_0447	e_0057		
40		e_0366	MUP1	r_0448	e_0513		
41		e_0367	ERG25	r_0449	e_0688		
42		e_0368	ADE6	r_0450	e_0567		
43		e_0369	VHT1	r_0451	e_0941		
44		e_0370	PDC6	r_0452	e_0940		
45		e_0371	CTT1	r_0453	e_0594		
46		e_0372	VAS1	r_0454	e_0262		
47		e_0373	VAS1	r_0455	e_0261		
48		e_0374	TPC1	r_0457	e_0672		
49		e_0375	MEP1	r_0458	e_0041		
50		e_0376	ASN2	r_0459	e_0039		
51		e_0377	TPO2	r_0460	e_0505		
52							
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e_0378	TPO2	r_0462	e_0515		
e_0379	SKN1	r_0463	e_0977		
e_0380	CYS4	r_0464	e_0473		
e_0384	MSM1	r_0466	e_0792		
e_0385	ERG1	r_0467	e_0079		
e_0386	ATF2	r_0468	e_0208		
e_0387	RNR4	r_0469	e_0751		
e_0388	RNR4	r_0470	e_0160		
e_0389	QCR9	r_0471	e_0016	e_0899	
e_0390	TYS1	r_0472	e_0150		
e_0391	HIP1	r_0473	e_0891		
e_0392	TDH3	r_0476	e_0955		
e_0393	PDX1	r_0477	e_0573		
e_0394	XKS1	r_0478	e_0867		
e_0395	PCT1	r_0479	e_0353		
e_0396	ADE3	r_0480	e_0822		
e_0397	SER2	r_0481	e_0104	e_0181	e_0242
e_0398	TRX2	r_0482	e_0910	e_0916	
e_0399	TRX2	r_0483	e_0086	e_0104	e_0242
e_0400	TRX2	r_0484	e_0910		
e_0401	PFK1	r_0485	e_0823		
e_0402	LSC2	r_0486	e_0392	e_0495	e_0525
e_0403	CPD1	r_0487	e_1051		
e_0404	SOL4	r_0488	e_0420		
e_0405	ENO1	r_0489	e_0288	e_0466	
e_0406	COQ6	r_0490	e_0480		
e_0407	GND2	r_0491	e_0129	e_0827	
e_0408	TNA1	r_0492	e_0828		
e_0409	MES1	r_0497	e_0920		
e_0410	FOL2	r_0499	e_0231		
e_0411	CAB4	r_0501	e_0012	e_0167	e_0311
e_0412	BGL2	r_0502	e_0638		
e_0413	BIO2	r_0503	e_0091		
e_0414	IMA1	r_0504	e_0012	e_0167	e_0311
e_0415	MAL11	r_0505	e_0012	e_0167	e_0185
e_0416	MAL12	r_0506	e_0012	e_0167	e_0311
e_0417	LAG1	r_0507	e_0012	e_0167	e_0311
e_0418	PRS3	r_0508	e_0012	e_0167	e_0311
e_0419	DUR3	r_0509	e_0012	e_0167	e_0311
e_0420	GUT1	r_0510	e_0317	e_0510	e_0603
e_0421	MUP3	r_0511	e_0974		
e_0422	QCR10	r_0512	e_0064	e_0963	
e_0423	LEU5	r_0514	e_0746		
e_0424	ERG11	r_0518	e_0758		
e_0425	DIA4	r_0519	e_0108	e_0527	
e_0426	ARG4	r_0520	e_0583		
e_0427	DED81	r_0521	e_0036		
e_0428	THR1	r_0522	e_0341		
e_0429	VMA16	r_0523	e_0209	e_0618	
e_0430	VMA16	r_0524	e_0410		

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2		e_0431	PUT2	r_0525	e_0025		
3		e_0432	VMA10	r_0526	e_0161		
4		e_0433	VMA10	r_0527	e_0226		
5		e_0434	NCP1	r_0528	e_0234		
6		e_0435	INM1	r_0529	e_0234		
7		e_0436	COX6	r_0530	e_0222	e_0301	e_0938
8		e_0437	PAN5	r_0531	e_0927		
9		e_0438	HTD2	r_0532	e_0191	e_0339	e_0406
10		e_0439	DYS1	r_0533	e_0325	e_0355	
11		e_0440	ERG7	r_0534	e_0106	e_0325	e_0355
12		e_0441	QNS1	r_0535	e_0325	e_0355	
13		e_0442	QNS1	r_0536	e_0103		
14		e_0443	MSR1	r_0537	e_0320		
15		e_0444	HXT4	r_0538	e_0476		
16		e_0445	HXT1	r_0539	e_0953		
17		e_0446	HXT5	r_0540	e_0954		
18		e_0447	GRE3	r_0541	e_0047		
19		e_0448	TRR2	r_0542	e_0196		
20		e_0450	FUR1	r_0543	e_0146	e_0154	
21		e_0451	ARO9	r_0544	e_0625	e_0945	
22		e_0452	DCD1	r_0545	e_0472		
23		e_0453	SOL3	r_0546	e_0548		
24		e_0454	ENO2	r_0547	e_0548		
25		e_0455	GND1	r_0548	e_0428		
26		e_0456	ERG9	r_0549	e_0799		
27		e_0457	BAT1	r_0550	e_0233	e_0398	
28		e_0458	IMD2	r_0551	e_0029	e_0124	
29		e_0459	INP51	r_0552	e_0400	e_0645	
30		e_0460	INP51	r_0553	e_0202		
31		e_0461	YIA6	r_0554	e_0846		
32		e_0463	DOT5	r_0555	e_0811		
33		e_0464	PDR11	r_0556	e_0933		
34		e_0465	HIS6	r_0557	e_0158		
35		e_0466	RHR2	r_0558	e_0697	e_0708	
36		e_0467	RNR3	r_0559	e_0716		
37		e_0468	RNR3	r_0560	e_0717		
38		e_0469	SER33	r_0561	e_0825	e_0939	e_0966
39		e_0470	THS1	r_0562	e_0226		
40		e_0471	CAB2	r_0563	e_0087		
41		e_0472	LYS12	r_0564	e_0875		
42		e_0473	SGA1	r_0565	e_0458	e_0693	e_0705
43		e_0474	PFK26	r_0566	e_0591		
44		e_0475	COX5B	r_0567	e_0370	e_0636	e_0647
45		e_0476	HIS5	r_0568	e_0038		
46		e_0477	KGD1	r_0569	e_0754		
47		e_0478	FLX1	r_0570	e_0631	e_0736	
48		e_0479	PAN6	r_0571	e_0211		
49		e_0480	GUT2	r_0572	e_0187		
50		e_0481	POT1	r_0573	e_0187		
51		e_0482	SUC2	r_0574	e_0187		
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e_0483	IMA3	r_0575	e_0187
e_0484	DAL1	r_0596	e_0274
e_0485	DAL4	r_0597	e_0274
e_0486	DAL2	r_0598	e_0274
e_0487	DAL7	r_0599	e_0274
e_0488	DAL3	r_0600	e_0274
e_0489	LYS1	r_0601	e_0274
e_0490	HYR1	r_0602	e_0274
e_0491	CYR1	r_0603	e_0274
e_0492	RNR2	r_0604	e_0274
e_0493	RNR2	r_0605	e_0274
e_0494	YJL045W	r_0606	e_0274
e_0495	TDH1	r_0607	e_0274
e_0496	BNA3	r_0608	e_0274
e_0497	YJL068C	r_0609	e_0274
e_0498	ARG2	r_0610	e_0274
e_0499	ARG3	r_0611	e_0274
e_0500	GWT1	r_0612	e_0274
e_0502	LSB6	r_0613	e_0274
e_0505	GSH1	r_0614	e_0274
e_0506	RPE1	r_0615	e_0274
e_0507	TRK1	r_0616	e_0275
e_0508	URA2	r_0617	e_0275
e_0509	LCB3	r_0618	e_0275
e_0510	GLG2	r_0619	e_0275
e_0511	YUR1	r_0620	e_0275
e_0512	INO1	r_0621	e_0275
e_0513	FBP26	r_0622	e_0275
e_0514	QCR8	r_0623	e_0275
e_0515	ERG20	r_0624	e_0275
e_0517	PHO90	r_0625	e_0275
e_0519	OPT1	r_0626	e_0275
e_0520	HXT8	r_0627	e_0275
e_0521	IMA5	r_0628	e_0275
e_0522	HXT9	r_0629	e_0275
e_0523	IMA4	r_0630	e_0275
e_0524	AVT1	r_0631	e_0275
e_0525	TDH2	r_0632	e_0275
e_0526	MET3	r_0633	e_0275
e_0527	GPI14	r_0634	e_0275
e_0528	ILV3	r_0635	e_0275
e_0529	TES1	r_0636	e_0275
e_0530	BNA1	r_0637	e_0275
e_0531	CYC1	r_0638	e_0275
e_0532	CYC1	r_0639	e_0275
e_0533	UTR1	r_0640	e_0275
e_0534	UTR1	r_0641	e_0275
e_0535	CDC8	r_0642	e_0275
e_0537	MIR1	r_0643	e_0275
e_0538	BNA2	r_0644	e_0275

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2		e_0539	SFC1	r_0645	e_0275
3		e_0540	URA8	r_0646	e_0274
4		e_0541	ADO1	r_0647	e_0274
5		e_0542	CPA2	r_0648	e_0274
6		e_0543	YMR1	r_0649	e_0274
7		e_0544	ATP2	r_0650	e_0274
8		e_0545	STR2	r_0651	e_0274
9		e_0546	XPT1	r_0652	e_0274
10		e_0547	MET5	r_0653	e_0274
11		e_0548	HOM6	r_0654	e_0274
12		e_0549	PMT4	r_0655	e_0274
13		e_0550	BAT2	r_0656	e_0859
14		e_0551	DAL5	r_0657	e_0859
15		e_0552	PGU1	r_0658	e_0771
16		e_0553	HXT16	r_0659	e_0984
17		e_0554	SOR1	r_0661	e_0769
18		e_0555	MPH3	r_0662	e_0289
19		e_0556	MET14	r_0663	e_0550
20		e_0558	LAC1	r_0664	e_0457
21		e_0559	ATP7	r_0665	e_0031
22		e_0560	RAM2	r_0666	e_0907
23		e_0561	URA6	r_0667	e_0922
24		e_0562	URA6	r_0668	e_0402
25		e_0563	GPX1	r_0669	e_0685
26		e_0564	MAE1	r_0670	e_0663
27		e_0565	UGP1	r_0671	e_0032
28		e_0566	OAR1	r_0672	e_0431
29		e_0567	FBA1	r_0673	e_0431
30		e_0568	YNK1	r_0674	e_0642
31		e_0569	VMA5	r_0675	e_0260
32		e_0570	VMA5	r_0676	e_0748
33		e_0571	MDH1	r_0678	e_0062
34		e_0572	CAB3	r_0679	e_0212
35		e_0573	GFA1	r_0680	e_0653
36		e_0574	AAT1	r_0681	e_0629
37		e_0575	OAC1	r_0682	e_0574
38		e_0576	PGM1	r_0683	e_0630
39		e_0577	RMA1	r_0687	e_0276
40		e_0578	TGL1	r_0688	e_0447
41		e_0579	SDH3	r_0689	e_0109
42		e_0580	AVT3	r_0690	e_0748
43		e_0581	SDH1	r_0691	e_0554
44		e_0582	GPM1	r_0692	e_0109
45		e_0583	MCD4	r_0693	e_0295
46		e_0584	TPO5	r_0694	e_0538
47		e_0585	PRS1	r_0695	e_0230
48		e_0586	FAS1	r_0697	e_0698
49		e_0587	SPE1	r_0698	e_0440
50		e_0588	PXA2	r_0699	e_0550
51		e_0590	MST1	r_0700	e_0457
52					
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e_0591	TRP3	r_0701	e_0926		
e_0594	URA1	r_0702	e_0689		
e_0596	JEN1	r_0703	e_0772		
e_0597	JEN1	r_0704	e_0773		
e_0598	FOX2	r_0705	e_0772		
e_0599	SPO14	r_0706	e_0773		
e_0600	GAP1	r_0707	e_0772		
e_0601	SHB17	r_0708	e_0773		
e_0602	YSR3	r_0711	e_0171		
e_0603	GLG1	r_0712	e_0776		
e_0604	KTR2	r_0713	e_0571		
e_0605	CCP1	r_0714	e_0838		
e_0607	GPT2	r_0715	e_0137		
e_0608	MET1	r_0716	e_0487	e_0782	
e_0609	SIS2	r_0717	e_0783		
e_0610	MTD1	r_0718	e_0564		
e_0611	TGL4	r_0719	e_0564		
e_0612	PCK1	r_0721	e_0878		
e_0613	YEH1	r_0722	e_0134		
e_0614	BPT1	r_0723	e_0269		
e_0615	DPS1	r_0724	e_0057		
e_0616	TPO1	r_0725	e_0396		
e_0617	TPO1	r_0726	e_0239	e_0658	
e_0618	GPI13	r_0727	e_0298		
e_0619	SDH2	r_0728	e_0021		
e_0620	FPS1	r_0729	e_0409		
e_0621	YBT1	r_0730	e_0384		
e_0622	AQY2	r_0731	e_0610		
e_0623	JLP1	r_0732	e_0396		
e_0624	MMP1	r_0733	e_0057		
e_0625	MHT1	r_0734	e_0949		
e_0626	LOT6	r_0735	e_0745		
e_0627	MEU1	r_0736	e_0745		
e_0628	YEH2	r_0737	e_0745		
e_0629	AAT2	r_0738	e_0745		
e_0630	AAT2	r_0739	e_0812		
e_0631	ADE16	r_0747	e_0049	e_0073	e_0909
e_0632	COX12	r_0748	e_0049	e_0073	e_0909
e_0636	PDC1	r_0749	e_0049	e_0073	e_0909
e_0637	ERG3	r_0750	e_0049	e_0073	e_0909
e_0638	SHM2	r_0751	e_0049	e_0073	e_0909
e_0639	FRS1	r_0752	e_0049	e_0073	e_0909
e_0640	XYL2	r_0753	e_0049	e_0073	e_0909
e_0641	GAL2	r_0754	e_0049	e_0073	e_0909
e_0642	ALT1	r_0755	e_0049	e_0073	e_0909
e_0643	SUL2	r_0756	e_0049	e_0073	e_0909
e_0644	ERG27	r_0757	e_0204	e_0435	
e_0645	AHP1	r_0758	e_0512		
e_0646	CKI1	r_0759	e_0290		
e_0647	PDC5	r_0760	e_0310		

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2		e_0648	NHA1	r_0761	e_0498	e_0729
3		e_0649	PUT1	r_0762	e_0232	
4		e_0650	SPE4	r_0763	e_0228	e_0230
5		e_0651	ACS2	r_0764	e_0336	
6		e_0652	ACS2	r_0765	e_0257	e_0533
7		e_0653	ASP3-1	r_0766	e_0258	e_0534
8		e_0654	ASP3-2	r_0766	e_0928	
9		e_0655	ASP3-3	r_0767	e_0130	e_0189 e_0833
10		e_0656	ASP3-4	r_0768	e_0441	
11		e_0657	DPH5	r_0769	e_0442	
12						
13		e_0658	SAM1	r_0770	e_0139	e_0737
14		e_0659	ATG26	r_0771	e_0257	e_0533
15		e_0660	COQ9	r_0772	e_0258	e_0534 e_0928
16		e_0661	PNP1	r_0773	e_0714	
17		e_0662	PNP1	r_0774	e_0876	
18		e_0663	BNA5	r_0775	e_0877	
19		e_0664	THI7	r_0781	e_0331	
20		e_0665	VPS34	r_0782	e_0670	
21		e_0666	CDD1	r_0783	e_0680	
22						
23		e_0667	GSY2	r_0784	e_0359	e_0681
24		e_0668	LCB5	r_0785	e_0358	e_0680
25		e_0669	ECI1	r_0786	e_0323	
26		e_0670	NNT1	r_0787	e_0324	
27		e_0671	ATP14	r_0788	e_0271	
28		e_0672	ECM38	r_0789	e_0271	
29		e_0673	EXG1	r_0790	e_0271	
30		e_0674	MET17	r_0791	e_0259	
31		e_0675	ACO1	r_0792	e_0271	
32		e_0676	ACO1	r_0793	e_0271	
33		e_0677	STT4	r_0795	e_0568	
34		e_0678	CDA1	r_0796	e_0568	
35		e_0679	CDA2	r_0797	e_0568	
36		e_0680	NMA1	r_0798	e_0568	
37		e_0681	NMA1	r_0799	e_0568	
38						
39		e_0682	FKS1	r_0800	e_0568	
40		e_0683	DIC1	r_0801	e_0568	
41		e_0684	TAL1	r_0802	e_0568	
42		e_0685	ILV5	r_0803	e_0568	
43		e_0686	ADE13	r_0804	e_0271	
44		e_0688	FBP1	r_0805	e_0271	
45		e_0689	NAM2	r_0806	e_0271	
46		e_0690	COX8	r_0807	e_0271	
47		e_0691	VIP1	r_0810	e_0259	
48		e_0692	URA4	r_0811	e_0568	
49						
50		e_0693	IMD3	r_0812	e_0674	
51		e_0694	CAR2	r_0813	e_0674	
52		e_0695	VMA6	r_0815	e_0008	
53		e_0696	VMA6	r_0816	e_0499	
54		e_0697	HMG2	r_0817	e_0587	
55		e_0698	GLO1	r_0818	e_0729	
56						
57						
58						
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e_0699	ERG6	r_0819	e_0694		
e_0700	APT1	r_0820	e_0712	e_0755	
e_0701	AMD1	r_0821	e_0249		
e_0702	CAT2	r_0831	e_0185	e_0311	e_0477
e_0703	CAT2	r_0832	e_0185	e_0311	e_0477
e_0704	CYB2	r_0841	e_0411		
e_0705	IMD4	r_0842	e_0245		
e_0707	DAK1	r_0843	e_0479		
e_0708	HMG1	r_0844	e_0529		
e_0709	ATP18	r_0845	e_0529		
e_0710	ALO1	r_0847	e_0529		
e_0711	TSL1	r_0848	e_0529		
e_0712	URA5	r_0849	e_0529		
e_0713	COQ5	r_0850	e_0529		
e_0714	NDI1	r_0851	e_0348		
e_0715	PHO84	r_0852	e_0312	e_0639	
e_0716	ERG13	r_0853	e_0958		
e_0717	ERG13	r_0854	e_0224		
e_0718	PLB2	r_0855	e_0352		
e_0720	PLB1	r_0882	e_0265		
e_0721	ADI1	r_0883	e_0398	e_0975	
e_0722	HXT2	r_0884	e_0612		
e_0723	SEC59	r_0885	e_0357		
e_0724	ERG5	r_0886	e_0401	e_0743	
e_0725	FMS1	r_0887	e_0401	e_0743	
e_0726	ARA2	r_0888	e_0576	e_0733	
e_0727	STV1	r_0889	e_0407	e_0455	
e_0728	AAC1	r_0890	e_0265		
e_0729	ARG7	r_0891	e_0294	e_0469	
e_0730	ADH3	r_0892	e_0113		
e_0731	VBA1	r_0893	e_0582		
e_0732	SRT1	r_0902	e_0314		
e_0733	PGM2	r_0903	e_0825	e_0939	e_0966
e_0734	ILV2	r_0904	e_0747		
e_0735	FOL3	r_0905	e_0471		
e_0736	ADE17	r_0906	e_0572	e_0609	e_0847
e_0737	NDE1	r_0907	e_0576	e_0733	e_0757
e_0739	ALD3	r_0908	e_0017		
e_0740	ALD2	r_0909	e_0103		
e_0741	GCV2	r_0910	e_0103		
e_0742	ERG2	r_0911	e_0860		
e_0743	PFK2	r_0912	e_0631	e_0736	
e_0744	HFA1	r_0913	e_0165		
e_0745	ERG12	r_0914	e_0352		
e_0746	GUA1	r_0915	e_0763		
e_0747	ERG8	r_0916	e_0030	e_0299	e_0418
e_0748	YMR226C	r_0917	e_0397		
e_0749	YHM2	r_0918	e_0872		
e_0751	GAD1	r_0919	e_0077		
e_0752	COX7	r_0920	e_0229		

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2		e_0753	TPS3	r_0921	e_0205		
3		e_0754	PPA2	r_0922	e_0206		
4		e_0755	URA10	r_0929	e_0725		
5		e_0756	SCS7	r_0935	e_0332		
6		e_0757	PGM3	r_0936	e_0725		
7		e_0758	GPI12	r_0937	e_0725		
8		e_0759	ABZ2	r_0938	e_0802		
9		e_0760	HER2	r_0939	e_0074		
10		e_0761	LCB1	r_0940	e_0649		
11		e_0762	LIP1	r_0941	e_0985		
12		e_0763	ADE4	r_0942	e_0272		
13		e_0764	ADH2	r_0943	e_0227	e_0627	e_0661
14		e_0765	TGL3	r_0949	e_0661		
15		e_0766	ADH6	r_0950	e_0662		
16		e_0767	FET4	r_0951	e_0661		
17		e_0768	PET8	r_0953	e_0048		
18		e_0769	IDP3	r_0954	e_0048		
19		e_0770	KTR5	r_0955	e_0048		
20		e_0771	IDH1	r_0956	e_0048		
21		e_0772	LAP2	r_0957	e_0276		
22		e_0773	LAP2	r_0958	e_0084	e_0334	
23		e_0774	COX5A	r_0959	e_0370	e_0636	e_0647
24		e_0775	LAT1	r_0960	e_0370	e_0636	e_0647
25		e_0776	MSK1	r_0961	e_0085	e_0306	e_0311
26		e_0777	AVT4	r_0962	e_0011	e_0895	
27		e_0778	LEU4	r_0963	e_0191	e_0339	e_0406
28		e_0779	LEU4	r_0964	e_0183		
29		e_0780	INP52	r_0965	e_0197		
30		e_0781	INP52	r_0966	e_0198		
31		e_0782	MLS1	r_0967	e_0841		
32		e_0783	MLS1	r_0968	e_0090		
33		e_0784	NRK1	r_0969	e_0119		
34		e_0786	AAH1	r_0970	e_0398		
35		e_0787	MEP2	r_0971	e_0398		
36		e_0789	CHS1	r_0972	e_0398		
37		e_0790	SPS19	r_0973	e_0398		
38		e_0791	ADE12	r_0974	e_0291	e_0387	e_0467
39		e_0792	ZWF1	r_0975	e_0292	e_0388	e_0468
40		e_0793	YNL247W	r_0976	e_0291	e_0387	e_0467
41		e_0794	FOL1	r_0977	e_0292	e_0388	e_0468
42		e_0796	PIK1	r_0978	e_0291	e_0387	e_0467
43		e_0797	LYP1	r_0979	e_0292	e_0388	e_0468
44		e_0798	ALP1	r_0982	e_0852		
45		e_0799	MET2	r_0983	e_0784		
46		e_0800	ERG24	r_0984	e_0506		
47		e_0801	PUS4	r_0985	e_0191	e_0339	e_0406
48		e_0802	PHA2	r_0986	e_0699		
49		e_0803	HXT14	r_0987	e_0497		
50		e_0805	CIT1	r_0988	e_0489		
51		e_0806	URK1	r_0989	e_0813		
52							
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e_0807	PHO91	r_0990	e_0567		
e_0808	ACC1	r_0993	e_0054	e_0177	e_0761
e_0810	ABZ1	r_0995	e_0168		
e_0811	COQ2	r_0995	e_0425		
e_0812	MVD1	r_0996	e_0182		
e_0813	LYS9	r_0997	e_0182		
e_0814	BIO5	r_0998	e_0083		
e_0815	BIO4	r_0999	e_0083		
e_0816	BIO3	r_1000	e_0261		
e_0817	DSE4	r_1001	e_0961		
e_0818	HXT17	r_1002	e_0650		
e_0819	PLB3	r_1003	e_0205		
e_0821	TAT2	r_1004	e_0509	e_0602	
e_0822	MSE1	r_1005	e_0509	e_0602	
e_0823	GSH2	r_1006	e_0668	e_0868	
e_0824	SPE2	r_1007	e_0668	e_0868	
e_0825	THI20	r_1010	e_0385		
e_0826	ARG1	r_1011	e_0385		
e_0827	GPD2	r_1012	e_0456		
e_0828	GPD2	r_1021	e_0188	e_0494	e_0579
e_0829	PRS5	r_1022	e_0402	e_0863	
e_0830	MET22	r_1023	e_0037		
e_0832	RIB2	r_1024	e_0482		
e_0833	HST1	r_1025	e_0526		
e_0834	ADH1	r_1026	e_0107		
e_0835	COQ3	r_1027	e_0321	e_0547	
e_0836	WRS1	r_1028	e_0621		
e_0837	ITR2	r_1029	e_0623		
e_0838	MDH2	r_1030	e_0012	e_0167	e_0306
e_0839	PFK27	r_1031	e_0577		
e_0840	ARG8	r_1031	e_0882		
e_0841	RIB4	r_1032	e_0059		
e_0842	GRE2	r_1033	e_0059		
e_0843	HXT11	r_1034	e_0864		
e_0844	AUS1	r_1035	e_0864		
e_0845	HST3	r_1036	e_0933		
e_0846	GLO4	r_1037	e_0399	e_0463	
e_0847	VHS3	r_1038	e_0218	e_0398	
e_0848	CYT1	r_1039	e_0124	e_0448	e_0916
e_0849	NRT1	r_1040	e_0260		
e_0850	CDC21	r_1041	e_0122		
e_0851	TGL5	r_1042	e_0470		
e_0852	RKI1	r_1043	e_0590		
e_0853	KTR1	r_1045	e_0850		
e_0854	CRC1	r_1046	e_0305		
e_0855	LEU9	r_1047	e_0035		
e_0856	INP53	r_1048	e_0684		
e_0857	INP53	r_1049	e_0063	e_0962	
e_0858	CAT5	r_1050	e_0063	e_0962	
e_0859	IAH1	r_1051	e_0065	e_0179	e_0711

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2		e_0860	ADE2	r_1054	e_0175		
3		e_0861	ORT1	r_1055	e_0330		
4		e_0862	IDH2	r_1056	e_0348		
5		e_0863	LSC1	r_1057	e_0836		
6		e_0864	THI80	r_1058	e_0201		
7		e_0865	ISN1	r_1063	e_0348		
8		e_0866	DDP1	r_1065	e_0630		
9		e_0867	GLN4	r_1066	e_0390		
10		e_0868	LCB4	r_1067	e_0918		
11		e_0870	HEM15	r_1068	e_0659		
12		e_0871	DCI1	r_1069	e_0144		
13		e_0872	SER1	r_1070	e_0040		
14		e_0873	SPR1	r_1071	e_0039		
15		e_0874	THI72	r_1072	e_0561		
16		e_0875	HIS3	r_1073	e_0562		
17		e_0876	NPT1	r_1074	e_0450		
18		e_0877	NPT1	r_1075	e_0082		
19		e_0878	MCT1	r_1076	e_0488		
20		e_0879	ODC2	r_1077	e_0806		
21		e_0880	DFR1	r_1078	e_0806		
22		e_0881	DFR1	r_1079	e_0561		
23		e_0882	MET7	r_1080	e_0562		
24		e_0883	DGA1	r_1081	e_0174		
25		e_0884	VPH1	r_1082	e_0608		
26		e_0885	TPO4	r_1083	e_0887		
27		e_0886	TPO4	r_1084	e_0565		
28		e_0887	HEM4	r_1085	e_0066	e_0155	e_0251
29		e_0888	CPA1	r_1086	e_0067	e_0156	e_0252
30		e_0890	PMT3	r_1087	e_0550		
31		e_0891	PRO2	r_1088	e_0457		
32		e_0892	VMA4	r_1089	e_0372		
33		e_0893	VMA4	r_1090	e_0373		
34		e_0894	ALA1	r_1091	e_0546		
35		e_0895	PYK2	r_1092	e_0640		
36		e_0896	PUT4	r_1093	e_0447		
37		e_0897	PDE2	r_1094	e_0394		
38		e_0898	ALD4	r_1095	e_0308	e_0335	e_0801
39		e_0899	GDH1	r_1099	e_0879	e_0923	
40		e_0900	ATF1	r_1101	e_0159	e_0896	
41		e_0901	FDH1	r_1104	e_0814		
42		e_0902	HST2	r_1106	e_0112		
43		e_0903	MET12	r_1108	e_0284	e_0285	e_0286
44		e_0904	ERG10	r_1109	e_0009		
45		e_0905	ERG10	r_1110	e_0024	e_0058	e_0728
46		e_0906	PMA2	r_1111	e_0967		
47		e_0907	ISM1	r_1112	e_0749		
48		e_0908	KTR6	r_1113	e_0551		
49		e_0909	SUR1	r_1114	e_0485		
50		e_0910	GRX5	r_1115	e_0225	e_0375	e_0787
51		e_0911	ALD6	r_1116	e_0967		
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e_0912	BTS1	r_1118	e_0951		
e_0913	ATP4	r_1119	e_0369		
e_0914	YDC1	r_1120	e_0854		
e_0915	GLR1	r_1125	e_0337		
e_0916	GLR1	r_1126	e_0093		
e_0917	SSU1	r_1127	e_0093		
e_0918	MSY1	r_1128	e_0093		
e_0919	MSD1	r_1129	e_0423		
e_0920	GDE1	r_1130	e_0078		
e_0921	CAR1	r_1131	e_0078		
e_0922	IDI1	r_1132	e_0009		
e_0923	ODC1	r_1133	e_0284	e_0285	e_0286
e_0924	PXA1	r_1134	e_0162	e_0215	e_0216
e_0925	PPT2	r_1135	e_0246	e_0309	e_0522
e_0926	CDC60	r_1136	e_0596		
e_0927	COX10	r_1139	e_0162	e_0215	e_0216
e_0928	POS5	r_1146	e_0464	e_0844	
e_0929	GUP2	r_1147	e_0464	e_0844	
e_0932	PUS1	r_1148	e_0464	e_0844	
e_0933	THI6	r_1151	e_0478		
e_0934	FAS2	r_1161	e_0464	e_0844	
e_0935	VMA11	r_1162	e_0464	e_0844	
e_0936	VMA11	r_1165	e_0351		
e_0937	HUT1	r_1166	e_0162	e_0163	e_0215
e_0938	YAH1	r_1167	e_0519		
e_0939	THI21	r_1168	e_0183	e_0614	
e_0940	FUM1	r_1169	e_0125		
e_0941	FUM1	r_1170	e_0125		
e_0942	DIP5	r_1171	e_0246	e_0338	e_0929
e_0943	PLC1	r_1172	e_0620		
e_0944	ATP15	r_1173	e_0102	e_0600	e_0821
e_0945	SAM4	r_1175	e_0157		
e_0946	SAM3	r_1176	e_0284	e_0285	e_0286
e_0947	CIT3	r_1177	e_0238	e_0837	
e_0948	PDH1	r_1183	e_0055	e_0102	e_0173
e_0949	ICL2	r_1184	e_0266	e_0600	e_0798
e_0950	ATP20	r_1185	e_0094		
e_0951	AGC1	r_1186	e_0102	e_0241	e_0600
e_0952	ATH1	r_1187	e_0524		
e_0953	HTS1	r_1188	e_0580	e_0777	
e_0954	HTS1	r_1189	e_0300		
e_0955	GLN1	r_1190	e_0316	e_0600	e_0942
e_0956	VMA13	r_1191	e_0068		
e_0957	VMA13	r_1192	e_0055	e_0056	e_0102
e_0958	MSF1	r_1193	e_0123		
e_0959	ARO7	r_1194	e_0951		
e_0960	FCY1	r_1195	e_0300		
e_0961	SPE3	r_1196	e_0102	e_0316	e_0600
e_0962	TKL1	r_1197	e_0524		
e_0963	GRS2	r_1198	e_0580	e_0777	

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2		e_0966	THI22	r_1199	e_0102	e_0241	e_0600
3		e_0967	ANT1	r_1200	e_0094	e_0110	e_0731
4		e_0968	MEP3	r_1201	e_0056	e_0391	e_0600
5		e_0970	ASN1	r_1202	e_0105		
6		e_0971	TPO3	r_1203	e_0524		
7		e_0972	TPO3	r_1204	e_0580	e_0777	
8		e_0973	KRE6	r_1205	e_0055	e_0056	e_0102
9		e_0974	GPH1	r_1206	e_0597		
10		e_0975	MET16	r_1207	e_0596		
11		e_0976	DPM1	r_1208	e_0105		
12		e_0977	GDB1	r_1209	e_0524		
13		e_0978	QCR2	r_1210	e_0580	e_0777	
14		e_0979	AQY1	r_1211	e_0055	e_0056	e_0102
15		e_0980	YER152C	r_1212	e_0094	e_0110	e_0731
16		e_0981	FMP37	r_1213	e_0600	e_0797	
17		e_0982	FMP43	r_1214	e_0055	e_0102	e_0173
18		e_0983	MPC2	r_1215	e_0055	e_0102	e_0173
19		e_0984	IDP2	r_1216	e_0600	e_0896	
20		e_0985	YHR020W	r_1217	e_0102	e_0241	e_0316
21		e_0986	ELO1	r_1218	e_0056	e_0102	e_0173
22		e_0987	FEN1	r_1219	e_0055	e_0056	e_0173
23		e_0988	SUR4	r_1220	e_0105		
24		e_0989	IFA38	r_1221	e_0094	e_0524	
25		e_0990	PHS1	r_1222	e_0580	e_0777	
26		e_0991	TSC13	r_1223	e_0055	e_0056	e_0102
27		e_0992	OLE1	r_1224	e_0055	e_0056	e_0102
28		e_0993	FAA1	r_1225	e_0464	e_0844	
29		e_0994	FAA4	r_1226	e_0683		
30		e_0995	FAA1	r_1227	e_0097	e_0163	e_0415
31		e_0996	FAA4	r_1228	e_0076		
32		e_0997	FAA3	r_1229	e_0247	e_0461	
33		e_0998	FAT1	r_1230	e_0461		
34		e_0999	FAT1	r_1231	e_0461		
35		e_1000	GPT2	r_1232	e_0461		
36		e_1001	SCT1	r_1235	e_0408		
37		e_1002	AYR1	r_1236	e_0924		
38		e_1003	AYR1	r_1237	e_0861		
39		e_1004	ALE1	r_1238	e_0266	e_0600	
40		e_1005	SLC1	r_1239	e_0575		
41		e_1006	PAH1	r_1241	e_0116		
42		e_1007	DPP1	r_1244	e_0096	e_0120	e_0517
43		e_1008	LPP1	r_1245	e_0282	e_0537	
44		e_1009	ARE2	r_1249	e_0507		
45		e_1010	ARE1	r_1250	e_0584		
46		e_1011	DGA1	r_1251	e_0616	e_0885	
47		e_1012	CDS1	r_1252	e_0617	e_0886	
48		e_1013	CDS1	r_1253	e_0345		
49		e_1014	CHO1	r_1254	e_0596		
50		e_1015	PIS1	r_1255	e_0946		
51		e_1016	CST26	r_1256	e_0768		
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e_1017	PSD1	r_1257	e_0624		
e_1018	PSD2	r_1258	e_0648		
e_1019	PSD2	r_1259	e_0584		
e_1020	CHO2	r_1260	e_0068	e_0419	e_0600
e_1021	OPI3	r_1261	e_0617	e_0886	
e_1022	DGK1	r_1262	e_0377	e_0616	e_0885
e_1023	EPT1	r_1263	e_0378	e_0617	e_0886
e_1024	CPT1	r_1264	e_0683		
e_1025	PGS1	r_1265	e_0539		
e_1026	GEP4	r_1266	e_0095	e_0643	
e_1027	CRD1	r_1267	e_0917		
e_1028	CLD1	r_1269	e_0374		
e_1029	TAZ1	r_1270	e_0664	e_0849	e_0874
e_1030	LSB6	r_1271	e_0937		
e_1031	FRQ1	r_1272	e_0042		
e_1032	PIK1	r_1273	e_0419		
e_1033	VPS15	r_1274	e_0027		
e_1034	FAB1	r_1275	e_0078		
e_1035	LRO1	r_1276	e_0078		
e_1036	NTE1	r_1277	e_0622	e_0979	
e_1037	PLC1	r_1278	e_0464	e_0844	
e_1038	PGC1	r_1284	e_1054	e_1055	
e_1039	SAC1	r_1285	e_1055		
e_1040	SAC1	r_1288	e_1056	e_1068	e_1069
e_1041	INP54	r_1289	e_1057		
e_1042	VAC14	r_1290	e_0767		
e_1043	FIG4	r_1291	e_0767		
e_1044	PHM8	r_1292	e_1058		
e_1045	LDH1	r_1293	e_1060		
e_1046	TGL2	r_1294	e_1061	e_1062	
e_1047	YJU3	r_1295	e_1063		
e_1048	IPT1	r_1296	e_1064		
e_1049	AUR1	r_1297	e_1065		
e_1050	KEI1	r_1302	e_1071		
e_1051	GCY1	r_1305	e_1066		
e_1053	melibiose	r_1306	e_1067		
e_1054	FRE1	r_1309	e_1072		
e_1055	FRE2	r_1315	e_1073	e_1074	
e_1056	FET3	r_1321	e_1075	e_1077	
e_1057	FTR1	r_1323	e_1075	e_1077	
e_1058	CTR1	r_1325	e_1076		
e_1059	CTR3	r_1328	e_1078		
e_1060	YFH1	r_1330	e_1077		
e_1061	MRS3	r_1334	e_1054	e_1055	e_1079
e_1062	MRS4	r_1337	e_1054	e_1055	e_1079
e_1063	CCC1	r_1340	e_1054	e_1055	e_1079
e_1064	FRE6	r_1343	e_1054	e_1055	e_1079
e_1065	SMF3	r_1346	e_1054	e_1055	e_1079
e_1066	FET5	r_1348	e_1087	e_1088	
e_1067	FTH1	r_1349	e_0222	e_0938	e_1060

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2		e_1068	ATX1	r_1350	e_0222	e_0938	e_1060
3		e_1069	CCC2	r_1351	e_0910	e_1089	e_1090
4		e_1070	GRX4	r_1352	e_0910	e_1089	e_1090
5		e_1071	FRE5	r_1353	e_0910	e_1089	e_1090
6		e_1072	HMX1	r_1355	e_1093	e_1094	e_1095
7		e_1073	BPT1	r_1356	e_1084	e_1093	e_1094
8		e_1074	YCF1	r_1372	e_1096	e_1097	
9		e_1075	ARN1	r_1374	e_0181	e_0304	e_1098
10		e_1076	ARN2	r_1375	e_1070	e_1106	e_1107
11		e_1077	ARN3	r_1376	e_1102	e_1103	e_1104
12		e_1078	ARN4	r_1377	e_1110	e_1111	e_1112
13		e_1079	FRE3	r_1380	e_1096		
14		e_1080	FRE4	r_1381	e_0181	e_0304	e_1115
15		e_1081	FIT1	r_1382	e_1114	e_1116	e_1117
16		e_1082	FIT2	r_1400	e_1119		
17		e_1083	FIT3	r_1401	e_1120		
18		e_1084	NFU1	r_1619	e_1053		
19		e_1085	ISU1	r_1838	e_0145		
20		e_1086	ISU2	r_1838	e_0153		
21		e_1087	NFS1	r_2029	e_0253		
22		e_1088	ISD11	r_2034	e_0981	e_0982	e_0983
23		e_1089	SSQ1	r_2079	e_0415		
24		e_1090	JAC1	r_2112	e_0496		
25		e_1091	MGE1	r_2115	e_0069	e_0834	
26		e_1092	SSC1	r_2116	e_0740		
27		e_1093	ISA1	r_2117	e_0451		
28		e_1094	ISA2	r_2118	e_0451		
29		e_1095	IBA57	r_2119	e_0451		
30		e_1096	ATM1	r_2126	e_0601		
31		e_1097	ERV1	r_2131	e_0135		
32		e_1098	CFD1	r_2132	e_0879	e_0923	
33		e_1099	NBP35	r_2140	e_0586	e_0934	
34		e_1100	DRE2	r_2141	e_0586	e_0934	
35		e_1101	TAH18	r_2142	e_0287		
36		e_1102	CIA1	r_2143	e_0287		
37		e_1103	CIA2	r_2144	e_0287		
38		e_1104	MET18	r_2145	e_0566		
39		e_1105	NAR1	r_2146	e_0566		
40		e_1106	CFD1	r_2147	e_0566		
41		e_1107	NBP35	r_2148	e_0438		
42		e_1108	DRE2	r_2149	e_0438		
43		e_1109	TAH18	r_2150	e_0438		
44		e_1110	CIA1	r_2151	e_0044		
45		e_1111	CIA2	r_2152	e_0044		
46		e_1112	MET18	r_2153	e_0044		
47		e_1113	NAR1	r_2154	e_0986		
48		e_1114	MSN5	r_2155	e_0986		
49		e_1115	PSE1	r_2156	e_0987		
50		e_1116	AFT1	r_2157	e_0987	e_0988	
51		e_1117	AFT2	r_2158	e_0987	e_0988	
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2		e_1118	GRX3	r_2159	e_0987	e_0988
3		e_1119	CYC3	r_2160	e_0988	
4		e_1120	CYT2	r_2161	e_0989	
5				r_2162	e_0989	
6				r_2163	e_0989	
7				r_2164	e_0989	
8				r_2165	e_0989	
9				r_2166	e_0989	
10				r_2167	e_0989	
11				r_2168	e_0990	
12				r_2169	e_0990	
13				r_2170	e_0990	
14				r_2171	e_0990	
15				r_2172	e_0990	
16				r_2173	e_0990	
17				r_2174	e_0990	
18				r_2175	e_0991	
19				r_2176	e_0991	
20				r_2177	e_0991	
21				r_2178	e_0991	
22				r_2179	e_0991	
23				r_2180	e_0991	
24				r_2181	e_0991	
25				r_2182	e_0992	
26				r_2183	e_0992	
27				r_2194	e_0993	
28				r_2195	e_0993	e_0994
29				r_2196	e_0993	e_0994
30				r_2197	e_0993	e_0994
31				r_2198	e_0993	e_0994
32				r_2199	e_0993	e_0994
33				r_2200	e_0995	
34				r_2201	e_0995	e_0996
35				r_2202	e_0995	e_0996
36				r_2203	e_0995	e_0996
37				r_2204	e_0995	e_0996
38				r_2205	e_0995	e_0996
39				r_2206	e_0273	
40				r_2207	e_0273	
41				r_2208	e_0273	
42				r_2209	e_0997	
43				r_2210	e_0997	
44				r_2211	e_0997	
45				r_2212	e_0997	
46				r_2213	e_0998	
47				r_2214	e_0998	
48				r_2215	e_0998	
49				r_2216	e_0999	
50				r_2217	e_0999	
51				r_2218	e_0999	
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2		r_2219	e_0588 e_0924
3		r_2220	e_0588 e_0924
4		r_2221	e_0588 e_0924
5		r_2222	e_0588 e_0924
6		r_2223	e_0588 e_0924
7		r_2224	e_0588 e_0924
8		r_2225	e_0588 e_0924
9		r_2226	e_0588 e_0924
10		r_2227	e_0588 e_0924
11		r_2228	e_0588 e_0924
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13		r_2232	e_0529
14		r_2233	e_0529
15		r_2234	e_0529
16		r_2235	e_0529
17		r_2236	e_0349
18		r_2237	e_0349
19		r_2238	e_0349
20		r_2239	e_0349
21		r_2240	e_0349
22		r_2241	e_0349
23		r_2242	e_0349
24		r_2243	e_0349
25		r_2244	e_0349
26		r_2245	e_0349
27		r_2246	e_0349
28		r_2247	e_0349
29		r_2248	e_0598
30		r_2249	e_0598
31		r_2250	e_0598
32		r_2251	e_0598
33		r_2252	e_0598
34		r_2253	e_0598
35		r_2254	e_0598
36		r_2255	e_0598
37		r_2256	e_0598
38		r_2257	e_0598
39		r_2258	e_0598
40		r_2259	e_0598
41		r_2260	e_0598
42		r_2261	e_0598
43		r_2262	e_0598
44		r_2263	e_0598
45		r_2264	e_0598
46		r_2265	e_0598
47		r_2266	e_0598
48		r_2267	e_0598
49		r_2268	e_0598
50		r_2269	e_0598
51		r_2270	e_0598
52		r_2271	e_0598
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r_2272	e_0598	
r_2273	e_0598	
r_2274	e_0598	
r_2275	e_0598	
r_2276	e_0598	
r_2277	e_0598	
r_2278	e_0598	
r_2279	e_0598	
r_2280	e_0598	
r_2281	e_0598	
r_2282	e_0598	
r_2283	e_0481	
r_2284	e_0481	
r_2285	e_0481	
r_2286	e_0481	
r_2287	e_0481	
r_2288	e_0481	
r_2289	e_0481	
r_2290	e_0481	
r_2291	e_0481	
r_2292	e_0481	
r_2293	e_0481	
r_2294	e_0481	
r_2295	e_0669	
r_2296	e_0669	
r_2297	e_0669	
r_2298	e_0669	
r_2299	e_0669	
r_2300	e_0669	
r_2301	e_0871	
r_2302	e_0871	
r_2303	e_0790	
r_2304	e_0790	
r_2305	e_0675	
r_2308	e_1000	e_1001
r_2309	e_1000	e_1001
r_2310	e_1000	
r_2311	e_1000	
r_2312	e_1000	e_1001
r_2313	e_1000	e_1001
r_2314	e_1000	
r_2315	e_1000	
r_2316	e_0607	
r_2317	e_0607	
r_2318	e_0607	
r_2319	e_0607	
r_2320	e_0607	
r_2321	e_0607	
r_2322	e_0607	
r_2323	e_0607	

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2			r_2324	e_1002	
3			r_2325	e_1002	
4			r_2326	e_1002	
5			r_2327	e_1002	
6			r_2328	e_1003	
7			r_2329	e_1003	
8			r_2330	e_1003	
9			r_2331	e_1003	
10			r_2332	e_1004	
11			r_2333	e_1004	e_1005
12			r_2334	e_1004	
13			r_2335	e_1004	e_1005
14			r_2336	e_1004	
15			r_2337	e_1004	e_1005
16			r_2338	e_1004	
17			r_2339	e_1004	e_1005
18			r_2340	e_0133	
19			r_2340	e_0611	e_0851
20			r_2341	e_0133	e_0611 e_0851
21			r_2342	e_0133	e_0611 e_0851
22			r_2343	e_0133	e_0611 e_0851
23			r_2344	e_1006	
24			r_2345	e_1006	
25			r_2346	e_1006	
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27			r_2348	e_1006	
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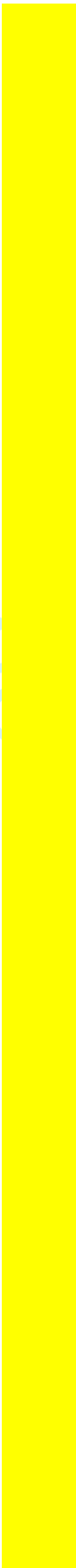
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r_3094	e_0943		
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r_3102	e_1038		
r_3103	e_1038		
r_3104	e_0599		
r_3105	e_0599		
r_3106	e_0599		
r_3107	e_0599		
r_3108	e_0599		
r_3109	e_0599		
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r_3111	e_0599		
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r_3199	e_0459	e_0780	e_0856
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r_3217	e_1042	e_1043	
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r_3231	e_1007		
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r_3235	e_1008		
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22			r_3261	e_0613	
23			r_3262	e_0628	
24			r_3263	e_0628	
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28			r_3267	e_0611	e_0765 e_0851
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19		r_3474	e_1049 e_1050
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24		r_3479	e_1049 e_1050
25		r_3480	e_1049 e_1050
26		r_3481	e_1049 e_1050
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28		r_3483	e_1049 e_1050
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30		r_3485	e_1049 e_1050
31		r_3486	e_1049 e_1050
32		r_3487	e_1049 e_1050
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34		r_3489	e_1049 e_1050
35		r_3490	e_1049 e_1050
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43		r_3498	e_1049 e_1050
44		r_3499	e_1049 e_1050
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46		r_3501	e_1049 e_1050
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r_4042	e_0482	
r_4045	e_0227	

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e_0250	e_0255	e_0322	e_0389	e_0422	e_0514	e_0531	e_0848	e_0978

e_0304 e_0915

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For Peer Review

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e_0522 e_0553 e_0555 e_0641 e_0722 e_0818 e_0843

	ORF	Cys	His	Arg	from SGD c	abundance in glucose	https://doi.org/10.101
1							
2	Q0010	1	0	1		#N/A	
3	Q0017	1	1	4		#N/A	
4	Q0032	0	3	1		#N/A	
5	Q0045	1	16	9		388.977	
6	Q0050	13	17	46		2603.06	
7	Q0055	21	30	45		538.199	
8	Q0060	3	6	14		186.712	
9	Q0065	3	8	13		534.913	
10	Q0070	7	15	18		49.199	
11	Q0075	2	5	7		#N/A	
12	Q0080	0	0	2		#N/A	
13	Q0085	1	4	4		434.625	
14	Q0092	1	0	3		#N/A	
15	Q0105	4	13	11		#N/A	
16	Q0110	7	9	10		155.417	
17	Q0115	6	10	13		#N/A	
18	Q0120	9	16	20		#N/A	
19	Q0130	1	0	1		#N/A	
20	Q0140	1	5	5		3039.64	
21	Q0142	0	1	3		#N/A	
22	Q0143	0	3	0		#N/A	
23	Q0144	1	0	0		#N/A	
24	Q0160	3	4	4		#N/A	
25	Q0182	0	2	9		#N/A	
26	Q0250	4	5	5		707.793	
27	Q0255	4	5	12		187.847	
28	Q0275	2	15	7		31.891	
29	Q0297	0	0	6		#N/A	
30	R0010W	5	9	20		792.109	
31	R0020C	7	12	20		4400.28	
32	R0030W	6	1	16		520.996	
33	R0040C	2	1	25		3484.83	
34	YAL001C	7	16	64		9854.33	
35	YAL002W	26	30	41		2215.92	
36	YAL003W	1	3	2		33686.7	
37	YAL004W	2	6	9		#N/A	
38	YAL005C	3	5	26		110976	
39	YAL007C	2	1	6		3796.52	
40	YAL008W	1	1	10		348.685	
41	YAL009W	2	5	24		1462.57	
42	YAL010C	5	11	20		1018.16	
43	YAL011W	3	9	40		2226.21	
44	YAL012W	0	14	13		25085.2	
45	YAL013W	6	10	20		5133.33	
46	YAL014C	2	4	12		941.815	
47	YAL015C	5	5	17		1880.7	
48	YAL016C-A	1	0	3		#N/A	
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2	YAL016C-B	0	1	2	#N/A
3	YAL016W	7	4	23	14534.9
4	YAL017W	12	35	52	9887.19
5	YAL018C	1	7	6	#N/A
6	YAL019W	7	22	50	13861.4
7	YAL019W-/	7	15	12	#N/A
8	YAL020C	12	11	19	1434.93
9	YAL021C	9	26	25	7068.03
10	YAL022C	4	9	18	1462.61
11	YAL023C	11	21	33	13172.9
12	YAL024C	9	30	67	4324.08
13	YAL025C	6	7	20	4698.43
14	YAL026C	13	27	58	10887
15	YAL026C-A	1	5	10	#N/A
16	YAL027W	2	8	12	672.081
17	YAL028W	4	24	21	510.103
18	YAL029C	15	26	65	12217.2
19	YAL030W	1	2	9	1844.75
20	YAL031C	10	18	42	8151.18
21	YAL031W-/	5	1	6	#N/A
22	YAL032C	1	8	24	2200.23
23	YAL033W	4	4	10	1726.04
24	YAL034C	3	7	28	224.003
25	YAL034C-B	2	3	4	#N/A
26	YAL034W-/	2	1	15	2789.98
27	YAL035W	7	12	44	25475.9
28	YAL036C	4	7	20	11634.2
29	YAL037C-A	0	1	0	#N/A
30	YAL037C-B	0	7	8	#N/A
31	YAL037W	5	2	10	#N/A
32	YAL038W	7	7	24	178510
33	YAL039C	4	8	13	1561.84
34	YAL040C	11	12	22	#N/A
35	YAL041W	7	25	34	5786.14
36	YAL042C-A	5	4	9	#N/A
37	YAL042W	10	16	21	7369.04
38	YAL043C	4	12	29	7689.28
39	YAL044C	0	3	5	2886.02
40	YAL044W-/	1	6	6	6180.67
41	YAL045C	6	6	4	#N/A
42	YAL046C	2	3	6	1443.36
43	YAL047C	0	14	23	3132.36
44	YAL047W-/	3	1	4	#N/A
45	YAL048C	17	13	24	2301.16
46	YAL049C	4	9	6	5700.21
47	YAL051W	18	26	48	2716.71
48	YAL053W	10	5	27	4739.65
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2	YAL054C	7	20	30	4478.07
3	YAL055W	5	2	10	791.321
4	YAL056C-A	4	1	9	#N/A
5	YAL056W	13	22	41	2716.04
6	YAL058W	6	13	19	3412.01
7					
8	YAL059C-A	4	1	9	#N/A
9	YAL059W	0	0	15	5707.29
10	YAL060W	11	17	8	4246.98
11	YAL061W	14	18	22	733.115
12	YAL062W	6	4	16	7280.91
13					
14	YAL063C	17	4	19	#N/A
15	YAL063C-A	4	3	7	#N/A
16	YAL064C-A	3	2	2	#N/A
17	YAL064W	3	2	7	#N/A
18					
19	YAL064W-E	5	7	0	#N/A
20	YAL065C	0	2	2	#N/A
21	YAL066W	2	5	6	#N/A
22	YAL067C	8	9	23	#N/A
23	YAL067W-/	4	1	7	#N/A
24					
25	YAL068C	0	2	4	#N/A
26	YAL068W-/	2	8	0	#N/A
27	YAL069W	4	10	0	#N/A
28					
29	YAR002C-A	5	6	8	6203.1
30	YAR002W	0	6	21	14854.5
31	YAR003W	10	12	17	2096.21
32	YAR007C	5	9	33	11861.1
33	YAR008W	1	7	16	756.69
34	YAR009C	11	39	53	#N/A
35	YAR010C	4	14	14	36912.2
36	YAR014C	3	16	25	3741.68
37	YAR015W	1	6	12	17876.9
38	YAR018C	6	14	26	3127.08
39	YAR019C	13	23	33	3405.86
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41	YAR019W-/	3	3	6	#N/A
42	YAR020C	0	1	2	#N/A
43	YAR023C	4	4	5	#N/A
44	YAR027W	4	8	6	1595.77
45	YAR028W	3	6	4	145.269
46	YAR029W	3	2	4	#N/A
47	YAR030C	5	4	9	#N/A
48	YAR031W	5	7	13	#N/A
49	YAR033W	2	4	14	993.162
50	YAR035C-A	1	0	6	#N/A
51	YAR035W	11	19	46	966.196
52	YAR042W	8	35	52	9695.51
53	YAR047C	4	1	3	#N/A
54	YAR050W	16	5	25	#N/A
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2	YAR053W	5	1	4	#N/A
3	YAR060C	3	0	15	#N/A
4	YAR064W	7	4	7	#N/A
5	YAR066W	0	1	2	71.433
6	YAR068W	0	8	3	#N/A
7	YAR069C	3	4	1	#N/A
8	YAR070C	6	2	5	#N/A
9	YAR071W	9	9	15	1502.19
10	YAR073W	6	3	17	#N/A
11	YAR075W	2	4	7	#N/A
12	YBL001C	2	5	4	#N/A
13	YBL002W	0	2	6	22806.3
14	YBL003C	0	3	10	4062.81
15	YBL004W	19	55	121	31586.9
16	YBL005W	19	21	39	998.638
17	YBL005W-/	5	16	17	#N/A
18	YBL005W-E	17	63	75	44189.1
19	YBL006C	4	10	11	1188.28
20	YBL006W-/	5	1	6	#N/A
21	YBL007C	5	12	49	16829.2
22	YBL008W	13	20	40	5855.53
23	YBL008W-/	5	2	5	#N/A
24	YBL009W	11	23	30	3256.63
25	YBL010C	4	6	16	2721.39
26	YBL011W	9	19	38	6691.61
27	YBL012C	6	5	13	#N/A
28	YBL013W	9	8	32	1736.66
29	YBL014C	6	20	43	1013.68
30	YBL015W	4	20	26	3545.54
31	YBL016W	6	12	21	4249.38
32	YBL017C	37	24	54	22921.4
33	YBL018C	2	3	6	1337.02
34	YBL019W	11	8	34	2774.29
35	YBL020W	7	7	22	921.193
36	YBL021C	3	2	6	261.331
37	YBL022C	7	19	51	20488.4
38	YBL023C	9	17	77	10401
39	YBL024W	14	18	36	22602.9
40	YBL025W	3	5	6	1749.63
41	YBL026W	1	1	6	1798.2
42	YBL027W	0	7	28	35371.5
43	YBL028C	0	3	9	4672.65
44	YBL029C-A	5	3	3	122.198
45	YBL029W	4	5	18	#N/A
46	YBL030C	4	0	15	10381.6
47	YBL031W	0	12	24	125.285
48	YBL032W	2	8	18	12373.5
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2	YBL033C	7	11	25	5022.8
3	YBL034C	14	26	44	6343.66
4	YBL035C	4	14	27	10994.1
5	YBL036C	4	5	10	11261.6
6	YBL037W	12	11	41	7961.66
7	YBL038W	2	5	19	1488.15
8	YBL039C	8	20	21	50296.8
9	YBL039C-A	2	1	2	#N/A
10	YBL039W-E	1	1	2	#N/A
11	YBL040C	0	8	8	1112.39
12	YBL041W	2	6	11	3406.52
13	YBL042C	11	5	21	4218.39
14	YBL043W	3	8	7	#N/A
15	YBL044W	5	6	14	#N/A
16	YBL045C	1	9	15	4302.21
17	YBL046W	6	7	17	3301.36
18	YBL047C	3	21	38	27379.3
19	YBL048W	3	0	3	#N/A
20	YBL049W	7	5	9	119.164
21	YBL050W	7	3	10	6173.46
22	YBL051C	1	16	21	4196.14
23	YBL052C	11	17	55	1914.68
24	YBL053W	4	1	2	#N/A
25	YBL054W	3	28	28	4814.52
26	YBL055C	9	11	14	4529.32
27	YBL056W	14	12	15	5654.75
28	YBL057C	4	4	7	3474.99
29	YBL058W	2	6	25	12894.9
30	YBL059C-A	4	3	7	2060.66
31	YBL059W	4	4	14	1035.73
32	YBL060W	8	15	24	2066.59
33	YBL061C	4	16	30	10919.2
34	YBL062W	6	0	3	#N/A
35	YBL063W	16	27	41	2032.48
36	YBL064C	3	3	11	1226.48
37	YBL065W	0	5	9	#N/A
38	YBL066C	16	34	45	2074.16
39	YBL067C	16	14	28	4736.17
40	YBL068W	5	10	14	8095.04
41	YBL068W-/-	2	2	1	#N/A
42	YBL069W	5	11	12	3907.85
43	YBL070C	6	0	4	#N/A
44	YBL071C	2	3	4	#N/A
45	YBL071C-B	1	3	1	#N/A
46	YBL071W-/-	4	1	1	84.44
47	YBL072C	2	4	22	20439.6
48	YBL073W	7	1	3	#N/A
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2	YBL074C	3	12	11	2448.32
3	YBL075C	2	6	34	1950.43
4	YBL076C	9	20	46	88630.7
5	YBL077W	4	5	5	#N/A
6	YBL078C	1	1	8	656.225
7	YBL079W	13	27	53	12551.6
8	YBL080C	3	16	25	2100.76
9	YBL081W	0	15	7	1387.89
10	YBL082C	10	13	18	847.388
11	YBL083C	3	5	10	#N/A
12	YBL084C	16	20	22	1969.15
13	YBL085W	4	26	44	13751.1
14	YBL086C	2	12	17	2794.56
15	YBL087C	2	0	10	17831.2
16	YBL088C	49	47	109	4985.44
17	YBL089W	10	12	18	116.682
18	YBL090W	1	1	19	886.884
19	YBL091C	4	14	21	16657.5
20	YBL091C-A	1	3	8	2088.54
21	YBL092W	0	8	11	35747.8
22	YBL093C	1	3	13	793.653
23	YBL094C	4	2	2	#N/A
24	YBL095W	4	11	11	395.23
25	YBL096C	3	2	5	#N/A
26	YBL097W	5	16	35	4314.9
27	YBL098W	7	13	26	2896.49
28	YBL099W	1	6	35	19726.9
29	YBL100C	6	0	6	#N/A
30	YBL100W-/	3	18	15	6158.13
31	YBL100W-E	15	64	74	#N/A
32	YBL100W-C	0	0	3	#N/A
33	YBL101C	7	24	60	6085.9
34	YBL102W	5	1	13	1066.77
35	YBL103C	0	18	22	1045.57
36	YBL104C	23	19	64	6375.34
37	YBL105C	24	30	56	12158.9
38	YBL106C	14	22	41	5900.1
39	YBL107C	6	1	14	1457.47
40	YBL107W-/	1	0	3	#N/A
41	YBL108C-A	0	0	2	#N/A
42	YBL108W	8	4	6	#N/A
43	YBL109W	2	12	2	#N/A
44	YBL111C	14	14	46	#N/A
45	YBL112C	4	0	8	#N/A
46	YBL113C	12	11	47	#N/A
47	YBL113W-/	4	6	9	#N/A
48	YBR001C	7	18	46	5038.02
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2	YBR002C	5	7	22	2584.99
3	YBR003W	5	15	28	4421.49
4	YBR004C	8	5	14	#N/A
5	YBR005W	1	5	16	691.483
6	YBR006W	11	7	15	1488.48
7	YBR007C	10	17	36	2624.63
8	YBR008C	15	8	24	553.176
9	YBR009C	0	2	14	12759.2
10	YBR010W	0	2	17	7963.25
11	YBR011C	1	6	6	29866.5
12	YBR012C	6	3	7	#N/A
13	YBR012W-/	3	13	14	#N/A
14	YBR012W-I	15	60	73	#N/A
15	YBR013C	5	2	3	#N/A
16	YBR014C	1	7	7	2872.19
17	YBR015C	7	11	17	17351.5
18	YBR016W	5	3	3	40.298
19	YBR017C	16	19	23	7816.53
20	YBR018C	6	13	19	#N/A
21	YBR019C	10	14	28	877.86
22	YBR020W	14	11	16	#N/A
23	YBR021W	16	11	21	1944.78
24	YBR022W	6	3	5	712.934
25	YBR023C	22	23	46	16452.3
26	YBR024W	7	4	23	1724.78
27	YBR025C	6	7	19	29863
28	YBR026C	2	5	10	4963.34
29	YBR027C	7	4	6	#N/A
30	YBR028C	5	14	22	6340.98
31	YBR029C	12	12	10	6466.72
32	YBR030W	9	15	15	2722.77
33	YBR031W	1	10	25	48720.3
34	YBR032W	2	2	4	62.273
35	YBR033W	25	15	46	673.986
36	YBR034C	3	12	10	11442.9
37	YBR035C	1	4	21	9408.58
38	YBR036C	7	4	11	1937.46
39	YBR037C	4	4	15	909.728
40	YBR038W	12	21	49	5987.96
41	YBR039W	2	4	14	4551.32
42	YBR040W	4	3	9	#N/A
43	YBR041W	9	15	30	7328.48
44	YBR042C	4	9	15	3308.93
45	YBR043C	6	10	35	809.005
46	YBR044C	12	8	26	1626.55
47	YBR045C	10	13	38	#N/A
48	YBR046C	2	2	9	3896.25
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2	YBR047W	1	7	9	125.19
3	YBR048W	2	5	12	24434.8
4	YBR049C	6	29	36	8249.49
5	YBR050C	7	9	20	38.536
6	YBR051W	2	5	3	#N/A
7	YBR052C	3	4	4	3584.01
8	YBR053C	9	9	8	5525.69
9	YBR054W	5	6	9	6966.92
10	YBR055C	11	11	53	7198.43
11	YBR056C-B	4	3	3	#N/A
12	YBR056W	4	18	15	4957.84
13	YBR056W-/	14	1	2	#N/A
14	YBR057C	1	11	10	2130.27
15	YBR058C	27	16	22	6818.68
16	YBR058C-A	1	3	2	173.974
17	YBR059C	6	26	57	8855.38
18	YBR060C	3	11	31	2934.19
19	YBR061C	8	6	15	1145.89
20	YBR062C	7	6	9	451.662
21	YBR063C	5	4	24	#N/A
22	YBR064W	1	0	1	#N/A
23	YBR065C	10	6	15	2863.31
24	YBR066C	8	10	14	137.373
25	YBR067C	0	1	2	613.16
26	YBR068C	10	11	22	4663.03
27	YBR069C	14	13	23	5625.2
28	YBR070C	4	7	11	568.293
29	YBR071W	1	7	11	323.937
30	YBR072C-A	0	4	7	#N/A
31	YBR072W	0	3	8	2950.46
32	YBR073W	17	12	48	12425.6
33	YBR074W	9	26	39	7513.67
34	YBR076C-A	3	3	7	353.063
35	YBR076W	11	10	20	#N/A
36	YBR077C	2	4	2	1767.93
37	YBR078W	4	0	3	10206.4
38	YBR079C	1	18	59	57729.8
39	YBR080C	5	9	40	17979
40	YBR081C	6	22	46	13166.4
41	YBR082C	3	4	4	3240.48
42	YBR083W	3	13	18	1647.03
43	YBR084C-A	0	7	28	#N/A
44	YBR084W	8	26	42	42797.8
45	YBR085C-A	0	2	0	1993.79
46	YBR085W	4	0	13	218.374
47	YBR086C	8	27	17	18746.4
48	YBR087W	9	7	20	4923.49
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2	YBR088C	4	2	8	15169.8
3	YBR089C-A	0	0	10	3264.66
4	YBR089W	3	2	9	#N/A
5	YBR090C	2	0	12	#N/A
6	YBR091C	6	3	6	968.84
7	YBR092C	8	6	15	8110.23
8	YBR093C	10	9	14	155.029
9	YBR094W	8	17	20	8903.97
10	YBR095C	0	5	27	1714.53
11	YBR096W	9	3	7	1475.87
12	YBR097W	29	26	62	5002.95
13	YBR098W	7	13	33	1072.97
14	YBR099C	10	1	8	#N/A
15	YBR101C	2	4	9	7322.55
16	YBR102C	6	11	43	9304.47
17	YBR103C-A	3	1	5	#N/A
18	YBR103W	5	14	15	2702.91
19	YBR104W	4	1	18	1321.06
20	YBR105C	4	11	12	905.527
21	YBR106W	1	3	8	20232
22	YBR107C	3	3	11	337.976
23	YBR108W	1	19	39	5555.48
24	YBR109C	0	2	3	2668.11
25	YBR109W- <i>l</i>	2	3	5	#N/A
26	YBR110W	7	11	16	4124.43
27	YBR111C	4	3	12	7194.21
28	YBR111W- <i>l</i>	0	0	3	390.087
29	YBR112C	5	22	28	14202.7
30	YBR113W	9	3	9	#N/A
31	YBR114W	16	19	49	1176.35
32	YBR115C	14	26	61	424.719
33	YBR116C	10	1	7	#N/A
34	YBR117C	3	18	28	2347.86
35	YBR118W	7	11	18	147725
36	YBR119W	1	3	22	2370.28
37	YBR120C	0	2	11	2021.62
38	YBR121C	6	13	36	43084.5
39	YBR121C-A	1	0	1	#N/A
40	YBR122C	0	1	13	2886.17
41	YBR123C	3	10	19	7135.21
42	YBR124W	4	1	4	#N/A
43	YBR125C	7	15	19	3733.57
44	YBR126C	4	15	15	6264.49
45	YBR126W- <i>l</i>	2	4	1	886.503
46	YBR126W- <i>l</i>	4	1	8	#N/A
47	YBR127C	1	7	33	31180
48	YBR128C	9	10	18	#N/A
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2	YBR129C	4	13	13	1326.5
3	YBR130C	1	8	12	5640.5
4	YBR131C-A	0	1	2	#N/A
5	YBR131W	10	12	26	3181.07
6	YBR132C	14	11	24	3399.12
7	YBR133C	12	24	36	5284.61
8	YBR134W	5	9	4	#N/A
9	YBR135W	1	9	9	2909.71
10	YBR136W	34	48	105	3325.53
11	YBR137W	4	4	8	1830.54
12	YBR138C	6	9	27	230.156
13	YBR139W	11	12	19	3743.11
14	YBR140C	40	70	115	10231
15	YBR141C	9	9	24	1913.31
16	YBR141W-/	3	0	3	#N/A
17	YBR142W	5	15	35	14437.2
18	YBR143C	4	4	13	24340.3
19	YBR144C	3	3	7	#N/A
20	YBR145W	10	10	9	9327.98
21	YBR146W	0	5	22	1304.67
22	YBR147W	6	1	7	#N/A
23	YBR148W	6	12	23	145.83
24	YBR149W	3	10	13	7756.39
25	YBR150C	19	29	54	2568
26	YBR151W	9	9	15	4191.1
27	YBR152W	1	6	19	1166.17
28	YBR153W	4	6	10	1445.5
29	YBR154C	3	4	17	8742.13
30	YBR155W	5	3	16	9350.8
31	YBR156C	0	17	42	1326.91
32	YBR157C	2	9	16	309.668
33	YBR158W	12	15	33	266.298
34	YBR159W	5	5	17	4481.41
35	YBR160W	4	7	20	5383.09
36	YBR161W	5	12	17	789.2
37	YBR162C	12	8	8	3479.07
38	YBR162W-/	0	0	3	1133.28
39	YBR163W	7	23	20	583.202
40	YBR164C	1	1	6	2550.55
41	YBR165W	5	14	12	#N/A
42	YBR166C	7	13	9	5978.3
43	YBR167C	1	6	4	1616
44	YBR168W	5	9	20	130.988
45	YBR169C	4	9	33	14629.5
46	YBR170C	10	18	22	7377.96
47	YBR171W	3	2	10	3790.62
48	YBR172C	2	12	20	8198.26
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2	YBR173C	1	3	8	258.48
3	YBR174C	6	3	4	#N/A
4	YBR175W	12	11	9	2717.18
5	YBR176W	7	5	7	2281.47
6	YBR177C	5	10	24	10093.8
7	YBR178W	4	2	11	#N/A
8	YBR179C	6	17	38	8414.89
9	YBR180W	8	12	21	#N/A
10	YBR181C	1	2	28	46824.3
11	YBR182C	6	18	22	#N/A
12	YBR182C-A	1	2	0	#N/A
13	YBR183W	5	9	11	#N/A
14	YBR184W	14	12	30	#N/A
15	YBR185C	2	5	15	1412.99
16	YBR186W	11	11	25	#N/A
17	YBR187W	1	5	8	2439.31
18	YBR188C	1	1	8	574.742
19	YBR189W	0	4	24	57403.6
20	YBR190W	3	2	5	#N/A
21	YBR191W	1	6	14	17438.7
22	YBR191W-/	0	0	3	#N/A
23	YBR192W	3	6	16	1772.67
24	YBR193C	0	5	11	1455.11
25	YBR194W	0	3	13	784.878
26	YBR195C	7	18	13	2603.76
27	YBR196C	0	18	10	44452.4
28	YBR196C-A	1	0	4	#N/A
29	YBR196C-B	0	0	2	#N/A
30	YBR197C	1	6	14	1730.23
31	YBR198C	9	18	33	10113.7
32	YBR199W	8	11	17	12428.8
33	YBR200W	4	7	19	4863.36
34	YBR200W-/	3	2	6	#N/A
35	YBR201C-A	1	1	3	#N/A
36	YBR201W	3	3	8	130.744
37	YBR202W	12	10	46	6318.09
38	YBR203W	11	24	64	1224.47
39	YBR204C	9	10	14	1504.56
40	YBR205W	7	14	20	9865.87
41	YBR206W	4	2	4	#N/A
42	YBR207W	7	6	14	1416.84
43	YBR208C	31	23	74	9156.31
44	YBR209W	3	3	9	#N/A
45	YBR210W	5	1	5	438.84
46	YBR211C	1	5	18	1828.85
47	YBR212W	4	14	28	2360.81
48	YBR213W	8	6	19	1888.14
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2	YBR214W	6	14	20	1595.83
3	YBR215W	0	8	15	3732.9
4	YBR216C	14	6	22	4707.49
5	YBR217W	3	3	9	144.069
6	YBR218C	12	30	65	25842.6
7	YBR219C	4	3	7	#N/A
8	YBR220C	10	9	20	1133.45
9	YBR221C	1	4	19	7636.82
10	YBR221W-/	0	1	6	#N/A
11	YBR222C	5	12	22	5583.17
12	YBR223C	12	12	29	908.326
13	YBR223W-/	0	1	4	#N/A
14	YBR224W	7	9	6	#N/A
15	YBR225W	8	28	39	3361.44
16	YBR226C	5	2	4	#N/A
17	YBR227C	5	8	26	8768.88
18	YBR228W	11	13	20	159.047
19	YBR229C	6	35	34	9735.34
20	YBR230C	5	6	3	590.741
21	YBR230W-/	2	0	8	355.862
22	YBR231C	0	4	22	3054.01
23	YBR232C	4	1	4	#N/A
24	YBR233W	4	15	22	1675.03
25	YBR233W-/	0	3	3	#N/A
26	YBR234C	10	11	13	4155.55
27	YBR235W	16	17	44	7416.28
28	YBR236C	5	6	29	5359.12
29	YBR237W	9	14	41	4209.65
30	YBR238C	8	37	29	3526.75
31	YBR239C	17	13	27	1304.57
32	YBR240C	19	9	25	#N/A
33	YBR241C	8	9	16	433.373
34	YBR242W	5	4	12	2422.98
35	YBR243C	10	10	16	306.148
36	YBR244W	4	0	1	4498.15
37	YBR245C	9	22	61	23073.4
38	YBR246W	14	11	14	3287.94
39	YBR247C	2	9	24	10335.4
40	YBR248C	9	9	20	16996
41	YBR249C	5	8	17	18616.7
42	YBR250W	6	8	18	#N/A
43	YBR251W	2	9	19	4074.33
44	YBR252W	0	1	7	7330.5
45	YBR253W	1	1	4	758.989
46	YBR254C	1	5	7	1327.5
47	YBR255C-A	2	2	11	269.304
48	YBR255W	1	26	47	4175.3
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2	YBR256C	4	4	7	1610.22
3	YBR257W	6	2	16	2098.15
4	YBR258C	0	1	6	973.355
5	YBR259W	6	14	31	481.001
6	YBR260C	5	16	22	9440.13
7	YBR261C	3	5	10	2721.62
8	YBR262C	0	2	7	510.031
9	YBR263W	4	14	20	20793.2
10	YBR264C	4	3	5	4203.5
11	YBR265W	10	6	14	3201.53
12	YBR266C	10	1	5	#N/A
13	YBR267W	7	11	23	8891.6
14	YBR268W	1	2	8	961.561
15	YBR269C	1	1	12	64.329
16	YBR270C	3	15	26	430.707
17	YBR271W	7	9	15	1903.71
18	YBR272C	6	4	22	4710.47
19	YBR273C	4	14	34	3653.69
20	YBR274W	10	13	20	3941.42
21	YBR275C	19	42	79	10367
22	YBR276C	24	25	34	2897.05
23	YBR277C	4	2	6	#N/A
24	YBR278W	2	4	7	346.229
25	YBR279W	0	7	23	9267.53
26	YBR280C	11	18	27	1796.77
27	YBR281C	11	20	25	5250.83
28	YBR282W	1	2	9	1186.46
29	YBR283C	4	4	13	6034.14
30	YBR284W	13	23	32	#N/A
31	YBR285W	3	3	10	81.209
32	YBR286W	4	16	10	27563.8
33	YBR287W	3	4	10	1863.91
34	YBR288C	7	10	17	3408.15
35	YBR289W	4	18	45	5277.06
36	YBR290W	1	8	11	195.959
37	YBR291C	4	2	14	1235.2
38	YBR292C	3	4	5	#N/A
39	YBR293W	8	3	16	#N/A
40	YBR294W	14	15	31	#N/A
41	YBR295W	42	29	55	412.803
42	YBR296C	5	7	16	336.47
43	YBR296C-A	0	3	2	#N/A
44	YBR297W	18	13	25	314.069
45	YBR298C	18	3	21	#N/A
46	YBR298C-A	3	1	4	#N/A
47	YBR299W	5	14	26	613.581
48	YBR300C	7	8	12	#N/A
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2	YBR301W	0	2	4	#N/A
3	YBR302C	9	3	14	#N/A
4	YCL001W	2	4	9	6234.08
5	YCL001W- <i>f</i>	3	3	8	#N/A
6	YCL001W-E	0	1	3	#N/A
8	YCL002C	11	4	10	#N/A
9	YCL004W	5	8	26	1645.63
10	YCL005W	5	5	14	797.408
11	YCL005W- <i>f</i>	1	1	4	1122.36
12	YCL007C	3	10	12	#N/A
14	YCL008C	2	15	15	1425.91
15	YCL009C	6	10	21	4945.81
16	YCL010C	3	3	18	1927.02
17	YCL011C	6	5	50	9703.09
18	YCL012C	1	3	12	2875.66
20	YCL014W	17	28	59	14025.2
21	YCL016C	4	11	17	1162.53
22	YCL017C	6	16	29	4894.82
23	YCL018W	2	6	11	#N/A
24	YCL019W	15	62	75	#N/A
25	YCL020W	3	16	16	#N/A
26	YCL021W- <i>f</i>	2	4	8	#N/A
27	YCL022C	4	0	5	#N/A
28	YCL023C	5	4	10	#N/A
29	YCL024W	4	20	54	7258.36
30	YCL025C	11	13	24	1580.5
31	YCL026C-A	2	5	8	#N/A
32	YCL026C-B	0	4	5	1619.5
33	YCL027W	8	10	21	#N/A
34	YCL028W	0	7	6	2452.54
35	YCL029C	4	15	25	4049.81
36	YCL030C	11	13	24	29929.7
37	YCL031C	3	11	10	7324.75
38	YCL032W	7	7	18	631.102
39	YCL033C	7	6	13	1147.42
40	YCL034W	1	6	25	2784.76
41	YCL035C	2	3	3	4763.12
42	YCL036W	12	15	38	2771.75
43	YCL037C	0	17	15	12996.8
44	YCL038C	5	6	15	478.306
45	YCL039W	11	23	26	4114.06
46	YCL040W	7	15	22	6032.17
47	YCL041C	12	4	11	#N/A
48	YCL042W	2	3	10	#N/A
49	YCL043C	6	11	7	43242.7
50	YCL044C	1	13	20	5241.74
51	YCL045C	6	20	20	15434.6

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2	YCL046W	2	1	5	#N/A
3	YCL047C	6	8	10	2326.41
4	YCL048W	7	9	15	#N/A
5	YCL048W-/-	0	0	0	#N/A
6	YCL049C	5	3	12	415.714
7	YCL050C	6	8	5	20104.6
8	YCL051W	8	15	35	1521.27
9	YCL052C	5	10	24	2074.79
10	YCL054W	6	13	46	14475
11	YCL054W-/-	1	0	5	#N/A
12	YCL055W	5	12	16	1300.49
13	YCL056C	5	2	6	133.801
14	YCL057C-A	0	0	5	484.49
15	YCL057W	4	17	19	16510.4
16	YCL058C	5	3	3	#N/A
17	YCL058W-/-	1	0	6	793.915
18	YCL059C	4	4	23	12246.1
19	YCL061C	1	26	45	4775.38
20	YCL063W	5	8	29	301.515
21	YCL064C	8	6	12	1053.72
22	YCL065W	8	4	6	#N/A
23	YCL066W	1	5	9	#N/A
24	YCL067C	2	1	12	2487.77
25	YCL068C	2	9	17	#N/A
26	YCL069W	7	6	12	#N/A
27	YCL073C	11	8	23	#N/A
28	YCL074W	5	9	13	273.813
29	YCL075W	4	4	9	#N/A
30	YCL076W	4	3	10	#N/A
31	YCR001W	4	3	3	#N/A
32	YCR002C	1	8	22	4160.05
33	YCR003W	4	9	11	393.44
34	YCR004C	3	4	5	5181.87
35	YCR005C	0	13	18	2818.37
36	YCR006C	5	2	17	#N/A
37	YCR007C	3	4	7	28.888
38	YCR008W	16	18	29	4235.37
39	YCR009C	3	2	14	11621.3
40	YCR010C	3	4	7	1694.33
41	YCR011C	33	10	39	6569.47
42	YCR012W	1	8	13	110700
43	YCR013C	1	0	2	#N/A
44	YCR014C	16	7	30	1645.75
45	YCR015C	9	7	9	2056.18
46	YCR016W	1	3	8	15566.4
47	YCR017C	9	25	31	2829.7
48	YCR018C	7	1	21	#N/A
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2	YCR018C-A	2	4	0	#N/A
3	YCR019W	8	7	17	2496.91
4	YCR020C	6	6	8	206.57
5	YCR020C-A	0	1	5	490.253
6	YCR020W-I	1	1	6	588.537
7	YCR021C	8	8	11	125.848
8	YCR022C	5	3	13	#N/A
9	YCR023C	10	16	30	506.836
10	YCR024C	8	14	23	1385.32
11	YCR024C-A	1	0	4	#N/A
12	YCR024C-B	6	2	5	#N/A
13	YCR025C	3	8	13	#N/A
14	YCR026C	2	22	21	2745.58
15	YCR027C	5	2	11	544.165
16	YCR028C	9	10	25	126.939
17	YCR028C-A	0	2	8	3280.17
18	YCR030C	3	17	40	7205.31
19	YCR031C	1	2	15	16275.9
20	YCR032W	32	42	76	4331.96
21	YCR033W	4	35	74	7724.24
22	YCR034W	5	13	14	3439.25
23	YCR035C	5	5	23	7497.73
24	YCR036W	4	6	12	5353.71
25	YCR037C	11	13	25	5844.8
26	YCR038C	7	22	30	659.584
27	YCR038W-I	4	0	6	#N/A
28	YCR039C	2	1	12	#N/A
29	YCR040W	1	5	9	#N/A
30	YCR041W	7	2	5	#N/A
31	YCR042C	26	30	60	6504.69
32	YCR043C	5	4	2	1352.17
33	YCR044C	12	11	18	645.028
34	YCR045C	4	10	20	#N/A
35	YCR045W-I	3	1	6	#N/A
36	YCR046C	1	2	18	670.982
37	YCR047C	4	4	17	2213.75
38	YCR047W-I	5	4	2	#N/A
39	YCR048W	12	15	27	3229.12
40	YCR049C	8	0	13	#N/A
41	YCR050C	4	2	4	#N/A
42	YCR051W	1	6	14	5052.25
43	YCR052W	1	9	19	5562.61
44	YCR053W	2	6	16	28213.7
45	YCR054C	14	9	23	4829.37
46	YCR057C	8	18	44	16244.9
47	YCR059C	2	10	10	1993.58
48	YCR060W	2	2	5	1910.27
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2	YCR061W	8	17	24	359.712
3	YCR063W	9	4	13	3004.88
4	YCR064C	5	0	9	#N/A
5	YCR065W	4	20	25	2268.49
6	YCR066W	12	11	25	1777.42
7	YCR067C	2	17	25	5090.89
8	YCR068W	18	15	27	1544.36
9	YCR069W	4	11	9	4497.99
10	YCR071C	4	1	8	1757.53
11	YCR072C	12	17	23	10749.7
12	YCR073C	14	22	64	482.09
13	YCR073W-/	5	10	14	2287.85
14	YCR075C	5	6	10	170.579
15	YCR075W-/	0	2	2	814.023
16	YCR076C	2	3	10	1844.33
17	YCR077C	0	11	37	11451.1
18	YCR079W	9	10	22	1348.35
19	YCR081C-A	3	2	4	#N/A
20	YCR081W	22	40	35	6664.02
21	YCR082W	1	3	5	304.08
22	YCR083W	4	1	5	2685.29
23	YCR084C	7	14	27	13681.1
24	YCR085W	4	2	2	#N/A
25	YCR086W	1	2	3	1965.55
26	YCR087C-A	6	5	2	1882.19
27	YCR087W	6	11	13	#N/A
28	YCR088W	1	4	17	25773.5
29	YCR089W	25	13	12	#N/A
30	YCR090C	8	2	4	2455.05
31	YCR091W	15	21	38	625.979
32	YCR092C	11	30	47	5853.69
33	YCR093W	13	34	84	23128.6
34	YCR094W	6	8	14	3591.35
35	YCR095C	4	6	18	1950.35
36	YCR095W-/	1	3	3	#N/A
37	YCR096C	0	1	9	#N/A
38	YCR097W	2	4	8	402.164
39	YCR097W-/	5	2	5	#N/A
40	YCR098C	9	4	20	#N/A
41	YCR099C	10	2	7	#N/A
42	YCR100C	2	7	12	#N/A
43	YCR101C	3	3	8	#N/A
44	YCR102C	3	8	12	#N/A
45	YCR102W-/	1	0	3	#N/A
46	YCR104W	0	2	5	#N/A
47	YCR105W	10	14	11	#N/A
48	YCR106W	21	18	33	#N/A
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2	YCR107W	2	6	18	#N/A
3	YCR108C	1	8	2	#N/A
4	YDL001W	3	13	26	2384.05
5	YDL002C	2	1	17	5358.3
6	YDL003W	2	5	27	4635.21
7	YDL004W	1	2	5	2106.37
8	YDL005C	1	2	8	1390.79
9	YDL006W	5	7	16	2628.48
10	YDL007C-A	1	1	0	#N/A
11	YDL007W	4	6	20	11084
12	YDL008W	9	7	9	1134.45
13	YDL009C	4	6	5	#N/A
14	YDL010W	1	3	7	1572.34
15	YDL011C	3	0	0	#N/A
16	YDL012C	5	1	2	128.128
17	YDL013W	10	12	73	1784.9
18	YDL014W	3	7	35	24464.8
19	YDL015C	3	9	12	3702.16
20	YDL016C	2	0	6	#N/A
21	YDL017W	9	12	22	2797.31
22	YDL018C	7	7	17	962.099
23	YDL019C	6	33	59	18252.3
24	YDL020C	6	18	21	11.309
25	YDL021W	5	6	17	1195.46
26	YDL022C-A	6	2	6	#N/A
27	YDL022W	10	12	13	6099.24
28	YDL023C	1	1	0	#N/A
29	YDL024C	10	8	20	5.085
30	YDL025C	7	37	25	1861.85
31	YDL025W-/	1	2	2	#N/A
32	YDL026W	1	1	3	#N/A
33	YDL027C	3	5	17	5014.43
34	YDL028C	5	20	48	2520.08
35	YDL029W	3	7	25	12420
36	YDL030W	7	12	36	3576.32
37	YDL031W	2	12	59	18240.3
38	YDL032W	4	2	5	#N/A
39	YDL033C	6	10	26	1092.77
40	YDL034W	5	2	9	#N/A
41	YDL035C	11	17	36	1404.75
42	YDL036C	7	14	33	4049.61
43	YDL037C	4	4	2	#N/A
44	YDL039C	0	7	12	#N/A
45	YDL040C	8	12	37	32434.8
46	YDL041W	6	0	0	#N/A
47	YDL042C	11	17	19	5743.17
48	YDL043C	4	5	9	2466.78
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2	YDL044C	6	8	28	3465.31
3	YDL045C	5	7	15	1642.4
4	YDL045W-/	4	3	6	293.735
5	YDL046W	4	1	5	1635.72
6	YDL047W	10	9	14	4736.2
8	YDL048C	13	26	20	103.199
9	YDL049C	3	4	11	24.985
10	YDL050C	3	3	1	#N/A
11	YDL051W	2	4	20	9311.49
12	YDL052C	5	7	11	8647.63
14	YDL053C	1	2	8	4767.52
15	YDL054C	7	10	13	147.313
16	YDL055C	3	6	10	39847.4
17	YDL056W	1	22	40	4540.7
18	YDL057W	9	11	18	397.648
20	YDL058W	9	22	60	37191.7
21	YDL059C	3	4	8	1842.1
22	YDL060W	5	18	44	21687.6
23	YDL061C	4	4	8	13212.4
24	YDL062W	4	1	8	#N/A
26	YDL063C	8	9	20	4898.33
27	YDL064W	2	2	6	5690.15
28	YDL065C	2	4	6	6382.63
29	YDL066W	3	8	20	12612.3
31	YDL067C	0	1	4	246.019
32	YDL068W	2	1	6	#N/A
33	YDL069C	2	4	13	356.093
34	YDL070W	3	16	26	2266.48
36	YDL071C	6	4	4	#N/A
37	YDL072C	2	1	10	3833.3
38	YDL073W	16	23	39	5702.2
39	YDL074C	13	13	37	11052.4
40	YDL075W	0	3	11	33500.2
42	YDL076C	2	8	15	913.112
43	YDL077C	17	30	47	4201.67
44	YDL078C	1	6	11	5097.71
45	YDL079C	9	18	23	739.001
46	YDL080C	11	13	22	1390.06
48	YDL081C	0	0	0	1635.28
49	YDL082W	0	4	26	#N/A
50	YDL083C	0	3	10	24128.1
51	YDL084W	6	11	25	24964.6
52	YDL085C-A	0	0	9	408.775
54	YDL085W	2	7	23	1414.47
55	YDL086C-A	3	2	8	#N/A
56	YDL086W	7	8	16	2605.44
57	YDL087C	6	8	22	2145.85

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2	YDL088C	3	13	21	2818.05
3	YDL089W	3	11	25	2030.75
4	YDL090C	15	10	21	2517.62
5	YDL091C	3	11	35	1835.5
6	YDL092W	2	4	5	2268.53
7	YDL093W	15	24	23	1856.72
8	YDL094C	3	5	9	#N/A
9	YDL095W	9	25	27	11750.8
10	YDL096C	6	1	4	#N/A
11	YDL097C	6	10	13	10208.7
12	YDL098C	3	5	11	1990.37
13	YDL099W	0	1	9	3945.94
14	YDL100C	7	7	9	11284.9
15	YDL101C	8	11	23	5805.86
16	YDL102W	20	19	56	14495
17	YDL103C	7	8	16	16016.4
18	YDL104C	8	10	25	1420.49
19	YDL105W	1	12	27	1036.02
20	YDL106C	3	17	23	1745.6
21	YDL107W	7	6	15	685.031
22	YDL108W	4	7	16	2304.79
23	YDL109C	9	17	23	#N/A
24	YDL110C	1	3	8	850.379
25	YDL111C	1	7	7	3528.93
26	YDL112W	23	31	42	27450.9
27	YDL113C	2	16	28	3885.78
28	YDL114W	4	11	13	#N/A
29	YDL114W-/	2	2	1	#N/A
30	YDL115C	0	10	21	2268.7
31	YDL116W	7	15	27	8232.15
32	YDL117W	11	19	43	5514.22
33	YDL118W	5	3	5	#N/A
34	YDL119C	2	3	17	1087.26
35	YDL120W	2	5	9	59.504
36	YDL121C	0	2	6	6276.77
37	YDL122W	9	19	33	10754.9
38	YDL123W	6	2	6	247.207
39	YDL124W	1	5	8	8979.2
40	YDL125C	2	8	2	7374.47
41	YDL126C	4	11	51	41324.2
42	YDL127W	3	6	17	#N/A
43	YDL128W	3	11	7	636.37
44	YDL129W	0	4	23	370.184
45	YDL130W	0	1	0	4153.98
46	YDL130W-/	1	2	9	744.348
47	YDL131W	8	12	20	11147.1
48	YDL132W	6	20	33	11903.1
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2	YDL133C-A	0	0	10	#N/A
3	YDL133W	6	7	22	1801.09
4	YDL134C	9	12	16	4646.38
5	YDL135C	0	3	5	9417.55
6	YDL136W	1	0	11	19300
7	YDL137W	1	2	12	15610.3
8	YDL138W	9	13	24	#N/A
9	YDL139C	1	7	13	1619.44
10	YDL140C	21	35	83	41332.4
11	YDL141W	9	15	22	6893.9
12	YDL142C	3	2	16	81.829
13	YDL143W	7	8	31	17845.6
14	YDL144C	5	8	19	2288.47
15	YDL145C	11	30	55	29258.9
16	YDL146W	9	7	19	603.234
17	YDL147W	2	11	15	10375.9
18	YDL148C	3	13	50	15250.6
19	YDL149W	8	23	42	1686.32
20	YDL150W	0	6	26	9440.95
21	YDL151C	5	0	6	50.76
22	YDL152W	2	0	2	#N/A
23	YDL153C	1	8	32	19522.1
24	YDL154W	19	17	43	#N/A
25	YDL155W	5	16	26	453.72
26	YDL156W	4	9	30	2908.64
27	YDL157C	2	1	5	1620.07
28	YDL158C	5	1	5	#N/A
29	YDL159C-B	2	0	0	#N/A
30	YDL159W	7	15	24	3119.74
31	YDL159W-/	1	0	1	#N/A
32	YDL160C	7	15	23	12081.3
33	YDL160C-A	0	2	3	#N/A
34	YDL161W	2	5	29	6993.08
35	YDL162C	6	6	6	#N/A
36	YDL163W	4	0	4	#N/A
37	YDL164C	16	10	37	8317.18
38	YDL165W	2	4	11	4371.63
39	YDL166C	4	6	10	3804.77
40	YDL167C	15	21	27	8858.98
41	YDL168W	15	9	11	9170.13
42	YDL169C	1	7	14	40.592
43	YDL170W	13	13	19	1600.16
44	YDL171C	38	48	102	65960.7
45	YDL172C	1	0	2	#N/A
46	YDL173W	0	6	12	3128.49
47	YDL174C	12	16	24	3402.13
48	YDL175C	15	15	24	3668.61
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2	YDL176W	21	15	44	516.512
3	YDL177C	5	5	9	189.547
4	YDL178W	3	11	20	5809.8
5	YDL179W	3	9	19	#N/A
6	YDL180W	9	14	19	453.116
7	YDL181W	0	1	11	897.233
8	YDL182W	8	11	19	3877.92
9	YDL183C	2	6	12	265.333
10	YDL184C	0	0	10	#N/A
11	YDL185C-A	1	1	8	#N/A
12	YDL185W	12	20	55	62023.2
13	YDL186W	4	8	23	#N/A
14	YDL187C	5	5	9	#N/A
15	YDL188C	9	13	17	570.897
16	YDL189W	4	6	26	4481.07
17	YDL190C	10	18	42	10485.8
18	YDL191W	1	0	11	#N/A
19	YDL192W	1	2	12	4605.64
20	YDL193W	4	8	15	6344.56
21	YDL194W	7	14	34	183.389
22	YDL195W	7	22	27	25868
23	YDL196W	5	4	8	#N/A
24	YDL197C	4	16	23	2152.8
25	YDL198C	1	5	16	4007.49
26	YDL199C	6	14	31	806.66
27	YDL200C	4	4	8	332.996
28	YDL201W	4	9	16	7676.69
29	YDL202W	1	8	10	1587.88
30	YDL203C	11	7	18	5791.58
31	YDL204W	0	12	21	1141.33
32	YDL205C	8	8	15	4905.34
33	YDL206W	13	15	30	183.443
34	YDL207W	5	10	30	2316.91
35	YDL208W	1	3	4	12885.8
36	YDL209C	6	5	19	3730.98
37	YDL210W	14	5	12	#N/A
38	YDL211C	2	7	16	#N/A
39	YDL212W	5	5	4	1014.01
40	YDL213C	0	3	17	7770.8
41	YDL214C	13	18	36	216.714
42	YDL215C	10	23	38	3443.13
43	YDL216C	7	10	28	200.683
44	YDL217C	2	1	5	671.323
45	YDL218W	6	6	17	140.324
46	YDL219W	1	3	3	3553.56
47	YDL220C	20	21	45	1929.58
48	YDL221W	10	3	12	#N/A
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2	YDL222C	5	3	14	99.883
3	YDL223C	0	47	33	3051.88
4	YDL224C	6	20	23	3510.02
5	YDL225W	2	9	32	9444.72
6	YDL226C	6	7	15	24307.7
7	YDL227C	21	15	41	675.986
8	YDL228C	1	6	11	#N/A
9	YDL229W	3	5	29	109672
10	YDL230W	5	12	22	3109.57
11	YDL231C	18	30	66	16.015
12	YDL232W	0	1	0	#N/A
13	YDL233W	2	6	18	114.016
14	YDL234C	9	14	28	3415.02
15	YDL235C	1	2	6	5059.68
16	YDL236W	5	3	10	7367.69
17	YDL237W	6	10	13	2979.24
18	YDL238C	11	14	20	1705.53
19	YDL239C	4	18	35	1241.3
20	YDL240C-A	0	2	3	#N/A
21	YDL240W	30	22	41	6815.85
22	YDL241W	4	3	1	#N/A
23	YDL242W	3	3	8	#N/A
24	YDL243C	2	9	12	#N/A
25	YDL244W	10	5	11	329.264
26	YDL245C	14	6	17	#N/A
27	YDL246C	6	8	10	558.578
28	YDL247W	18	5	24	#N/A
29	YDL247W-1	0	2	1	#N/A
30	YDL248W	10	5	13	#N/A
31	YDR001C	6	16	44	6648.29
32	YDR002W	3	3	8	12177.9
33	YDR003W	1	3	18	600.273
34	YDR003W-1	2	0	3	#N/A
35	YDR004W	5	9	23	762.367
36	YDR005C	5	3	19	1344.44
37	YDR006C	9	21	47	5109.19
38	YDR007W	4	3	7	1021.03
39	YDR008C	3	1	2	#N/A
40	YDR009W	12	13	25	421.465
41	YDR010C	4	3	12	#N/A
42	YDR011W	26	28	60	14089.5
43	YDR012W	1	10	25	2220.54
44	YDR013W	4	2	11	824.067
45	YDR014W	3	13	26	2505.15
46	YDR014W-1	2	1	11	#N/A
47	YDR015C	3	5	3	#N/A
48	YDR016C	0	0	2	#N/A
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2	YDR017C	16	38	54	8856.52
3	YDR018C	7	8	17	201.102
4	YDR019C	3	11	14	2472.81
5	YDR020C	2	4	11	3991.14
6	YDR021W	5	4	19	5539.02
7	YDR022C	1	2	6	770.433
8	YDR023W	8	9	17	46364.4
9	YDR024W	4	9	13	#N/A
10	YDR025W	2	5	12	#N/A
11	YDR026C	7	11	45	1550.65
12	YDR027C	10	20	47	4181.29
13	YDR028C	3	33	39	9586.65
14	YDR029W	3	1	3	#N/A
15	YDR030C	10	8	31	207.957
16	YDR031W	8	1	6	1088.2
17	YDR032C	1	6	4	3616.13
18	YDR033W	10	6	9	4498.72
19	YDR034C	14	16	29	3298.65
20	YDR034C-A	1	2	0	#N/A
21	YDR034C-C	3	15	14	#N/A
22	YDR034C-D	15	60	74	#N/A
23	YDR034W-I	9	4	4	#N/A
24	YDR035W	8	7	20	9048.18
25	YDR036C	8	6	21	3555.93
26	YDR037W	9	16	35	64735
27	YDR038C	16	20	41	9474.94
28	YDR039C	16	20	41	#N/A
29	YDR040C	16	22	39	508.897
30	YDR041W	1	5	14	2038.15
31	YDR042C	0	2	9	#N/A
32	YDR043C	7	9	15	315.166
33	YDR044W	3	12	21	4346.36
34	YDR045C	8	1	5	1370.73
35	YDR046C	9	11	25	1713.76
36	YDR047W	6	6	21	5907.9
37	YDR048C	1	4	5	#N/A
38	YDR049W	5	13	36	2870.02
39	YDR050C	2	3	8	62262.3
40	YDR051C	5	12	30	4412.45
41	YDR052C	6	19	38	2999.88
42	YDR053W	7	1	5	#N/A
43	YDR054C	1	6	13	2109.76
44	YDR055W	4	3	1	3412.07
45	YDR056C	3	0	4	5143.45
46	YDR057W	9	8	19	2921.59
47	YDR058C	8	7	10	1248.65
48	YDR059C	3	3	2	211.279
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2	YDR060W	2	17	31	23409.8
3	YDR061W	9	14	25	3878.02
4	YDR062W	14	12	34	10187.1
5	YDR063W	2	0	6	2159.55
6	YDR064W	0	4	14	11653.5
7	YDR065W	6	10	15	724.581
8	YDR066C	6	6	7	640.211
9	YDR067C	6	5	13	1126.55
10	YDR068W	2	5	6	6515.52
11	YDR069C	20	29	27	2832.64
12	YDR070C	0	2	9	34.863
13	YDR071C	2	6	6	14130.9
14	YDR072C	5	19	18	1392.24
15	YDR073W	1	2	6	695.376
16	YDR074W	11	18	43	9623.6
17	YDR075W	9	7	17	2939.86
18	YDR076W	7	6	24	#N/A
19	YDR077W	6	1	0	504.892
20	YDR078C	5	9	6	1864.6
21	YDR079C-A	1	2	3	799.155
22	YDR079W	1	0	7	598.221
23	YDR080W	12	22	31	6313.87
24	YDR081C	10	19	31	4081.7
25	YDR082W	8	11	18	17.564
26	YDR083W	5	5	24	9951.58
27	YDR084C	4	2	8	898.305
28	YDR085C	7	17	40	81.264
29	YDR086C	1	1	3	1916.77
30	YDR087C	1	3	16	8835.17
31	YDR088C	3	9	27	3901.46
32	YDR089W	14	16	39	2882.41
33	YDR090C	8	4	11	559.705
34	YDR091C	14	9	33	30166.2
35	YDR092W	1	2	7	2647.67
36	YDR093W	27	23	95	15471
37	YDR094W	5	1	9	#N/A
38	YDR095C	4	9	10	#N/A
39	YDR096W	13	20	30	3729.1
40	YDR097C	14	20	53	11847.6
41	YDR098C	3	6	6	6384
42	YDR098C-A	3	13	14	#N/A
43	YDR098C-B	13	62	71	#N/A
44	YDR099W	1	5	12	26405.4
45	YDR100W	1	1	3	#N/A
46	YDR101C	9	15	23	14492.2
47	YDR102C	5	1	7	#N/A
48	YDR103W	16	20	41	4779.95
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2	YDR104C	18	34	90	1263.01
3	YDR105C	13	6	12	1397.14
4	YDR106W	9	5	18	258.639
5	YDR107C	11	15	22	938.808
6	YDR108W	12	17	31	3469.36
7	YDR109C	18	12	36	2813.58
8	YDR110W	9	13	34	2270.35
9	YDR111C	8	10	23	5142.72
10	YDR112W	6	2	0	#N/A
11	YDR113C	1	5	14	2237.94
12	YDR114C	4	1	8	#N/A
13	YDR115W	1	1	13	400.35
14	YDR116C	3	3	18	3041.67
15	YDR117C	6	15	13	7032.29
16	YDR118W	8	12	30	2947.3
17	YDR118W-	1	2	4	#N/A
18	YDR119W	17	15	26	4054.33
19	YDR119W-	1	0	7	163.489
20	YDR120C	11	13	26	17520.9
21	YDR121W	1	4	7	3803.6
22	YDR122W	6	37	58	8384.44
23	YDR123C	1	21	12	919.408
24	YDR124W	5	4	14	#N/A
25	YDR125C	5	12	23	799.552
26	YDR126W	13	10	12	272.588
27	YDR127W	23	38	53	34064.7
28	YDR128W	26	30	55	5375.13
29	YDR129C	4	12	33	14189.6
30	YDR130C	2	5	19	2420.79
31	YDR131C	12	12	22	2436.31
32	YDR132C	9	8	20	1057.51
33	YDR133C	5	2	3	#N/A
34	YDR135C	20	29	68	22164.2
35	YDR136C	4	6	17	#N/A
36	YDR137W	6	12	25	2872.1
37	YDR138W	7	8	37	5812.15
38	YDR139C	0	3	2	3204.19
39	YDR140W	6	2	8	2634.63
40	YDR141C	19	26	71	13930.3
41	YDR142C	7	10	18	1201.37
42	YDR143C	6	13	35	2887.07
43	YDR144C	5	8	7	905.484
44	YDR145W	2	5	28	7958.58
45	YDR146C	9	13	39	3227.09
46	YDR147W	11	14	17	4992.36
47	YDR148C	1	4	22	3998.91
48	YDR149C	7	3	7	#N/A
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2	YDR150W	30	86	67	29504.4
3	YDR151C	9	5	11	187.722
4	YDR152W	3	5	9	6967.05
5	YDR153C	2	7	27	7458.3
6	YDR154C	4	2	5	#N/A
7	YDR155C	2	4	5	28974.5
8	YDR156W	0	2	4	3145.21
9	YDR157W	8	7	4	#N/A
10	YDR158W	9	8	15	19946.4
11	YDR159W	13	31	60	4655.68
12	YDR160W	7	18	44	#N/A
13	YDR161W	4	1	6	3339.6
14	YDR162C	0	3	5	2256.24
15	YDR163W	1	8	12	2868.38
16	YDR164C	5	18	37	4668.96
17	YDR165W	7	13	12	13591.3
18	YDR166C	14	11	33	5758.71
19	YDR167W	0	1	10	1570.09
20	YDR168W	0	13	9	15994.5
21	YDR169C	2	16	24	2451.77
22	YDR169C-A	1	1	7	#N/A
23	YDR170C	26	34	85	31742.3
24	YDR170W-	4	16	18	#N/A
25	YDR171W	1	12	18	2632.79
26	YDR172W	5	13	18	32411.1
27	YDR173C	2	5	16	941.714
28	YDR174W	0	5	8	3734.09
29	YDR175C	1	11	26	2894.38
30	YDR176W	1	6	30	5684.19
31	YDR177W	1	6	8	4261.94
32	YDR178W	2	3	6	405.011
33	YDR179C	3	3	7	392.065
34	YDR179W-	12	11	21	1560.43
35	YDR180W	20	32	54	6286.57
36	YDR181C	5	9	34	2666.36
37	YDR182W	5	15	29	1856.84
38	YDR182W-	2	2	2	#N/A
39	YDR183C-A	2	4	4	#N/A
40	YDR183W	4	7	13	2054.64
41	YDR184C	2	11	7	804.913
42	YDR185C	2	5	11	210.199
43	YDR186C	1	14	36	3249.18
44	YDR187C	7	3	5	#N/A
45	YDR188W	5	8	27	15905.8
46	YDR189W	2	7	19	10742.7
47	YDR190C	3	6	24	15345.1
48	YDR191W	10	10	24	#N/A
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2	YDR192C	0	0	3	1612.88
3	YDR193W	1	0	1	#N/A
4	YDR194C	7	12	51	10252.3
5	YDR194W-	3	1	2	#N/A
6	YDR195W	3	10	17	5664.66
7	YDR196C	4	3	14	1692.82
8	YDR197W	5	9	20	3299.09
9	YDR198C	8	13	17	2230.28
10	YDR199W	7	0	0	#N/A
11	YDR200C	3	15	28	2216.37
12	YDR201W	1	0	9	1006.72
13	YDR202C	9	6	14	3552.8
14	YDR203W	4	4	1	#N/A
15	YDR204W	3	9	28	1685.79
16	YDR205W	7	34	17	935.263
17	YDR206W	6	13	26	4672.89
18	YDR207C	9	21	46	4422.56
19	YDR208W	4	35	46	3385.18
20	YDR209C	3	2	7	#N/A
21	YDR210C-C	3	13	15	#N/A
22	YDR210C-C	13	59	72	#N/A
23	YDR210W	7	0	0	#N/A
24	YDR210W-	3	18	15	#N/A
25	YDR210W-I	15	63	75	#N/A
26	YDR211W	14	13	30	15277.8
27	YDR212W	8	9	27	22022.9
28	YDR213W	9	18	33	1577.68
29	YDR214W	3	6	9	5214.45
30	YDR215C	0	6	10	#N/A
31	YDR216W	22	37	61	9390.99
32	YDR217C	14	21	63	5465.7
33	YDR218C	5	9	21	561.391
34	YDR219C	4	10	28	1534.56
35	YDR220C	4	3	4	#N/A
36	YDR221W	18	10	30	5981.63
37	YDR222W	8	8	13	2137.34
38	YDR223W	8	12	19	#N/A
39	YDR224C	0	2	6	#N/A
40	YDR225W	0	3	10	#N/A
41	YDR226W	1	5	9	19746.6
42	YDR227W	5	26	48	10584.1
43	YDR228C	10	14	19	4241.73
44	YDR229W	3	10	18	2122.65
45	YDR230W	2	4	8	#N/A
46	YDR231C	2	3	8	2999.23
47	YDR232W	6	22	22	6419.92
48	YDR233C	4	8	2	10792.3
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2	YDR234W	9	16	20	7658.16
3	YDR235W	10	7	16	2656.33
4	YDR236C	2	4	9	2981.7
5	YDR237W	4	12	15	1949.93
6	YDR238C	10	20	37	31322.4
7	YDR239C	1	20	37	4374.61
8	YDR240C	8	13	27	2199.21
9	YDR241W	3	2	6	#N/A
10	YDR242W	12	8	21	#N/A
11	YDR243C	3	9	28	7976.8
12	YDR244W	6	10	22	4068.1
13	YDR245W	5	7	26	5543.68
14	YDR246W	2	2	8	2878.42
15	YDR246W-	2	3	8	#N/A
16	YDR247W	12	15	13	593.945
17	YDR248C	3	7	7	2736.18
18	YDR249C	4	16	19	471.789
19	YDR250C	4	5	4	#N/A
20	YDR251W	5	11	33	6291.05
21	YDR252W	2	6	3	1833.13
22	YDR253C	5	5	16	#N/A
23	YDR254W	4	11	21	632.477
24	YDR255C	10	16	10	1809.92
25	YDR256C	5	17	26	842.722
26	YDR257C	16	2	25	4614.06
27	YDR258C	7	11	60	8358.24
28	YDR259C	1	10	22	341.678
29	YDR260C	0	6	13	40.113
30	YDR261C	6	11	12	5073.94
31	YDR261C-C	4	13	14	#N/A
32	YDR261C-D	13	58	67	#N/A
33	YDR261W-	3	18	15	#N/A
34	YDR261W-I	15	62	75	#N/A
35	YDR262W	1	4	10	2171.55
36	YDR263C	10	7	19	#N/A
37	YDR264C	12	21	24	6744.73
38	YDR265W	13	7	19	1083.14
39	YDR266C	19	22	33	9090.11
40	YDR267C	6	9	10	1327.47
41	YDR268W	2	12	17	2143.77
42	YDR269C	4	3	1	#N/A
43	YDR270W	28	12	25	658.646
44	YDR271C	5	1	3	#N/A
45	YDR272W	8	8	13	5321.46
46	YDR273W	3	4	10	#N/A
47	YDR274C	4	5	11	#N/A
48	YDR275W	5	5	10	653.477
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2	YDR276C	1	0	1	#N/A
3	YDR277C	4	9	27	70.839
4	YDR278C	4	9	7	#N/A
5	YDR279W	3	7	10	5513.92
6	YDR280W	10	7	15	5412.21
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8	YDR281C	3	1	4	#N/A
9	YDR282C	7	5	23	1260.1
10	YDR283C	7	29	87	9693.16
11	YDR284C	3	9	17	1492.36
12					
13	YDR285W	7	18	30	#N/A
14	YDR286C	5	5	9	778.117
15	YDR287W	9	6	9	1589.76
16	YDR288W	1	6	12	2844.69
17	YDR289C	1	12	15	4625.24
18					
19	YDR290W	4	2	4	#N/A
20	YDR291W	23	34	58	3465.39
21	YDR292C	4	13	19	14411.5
22	YDR293C	6	36	70	15461.6
23	YDR294C	9	19	21	6764.66
24	YDR295C	6	16	27	6350.8
25	YDR296W	4	6	17	1983.77
26	YDR297W	1	18	11	1759.88
27	YDR298C	1	3	7	4675.36
28					
29	YDR299W	1	7	23	15247.8
30	YDR300C	3	11	18	11172.4
31	YDR301W	12	25	58	10190
32	YDR302W	4	4	6	282.834
33	YDR303C	12	16	34	11911.6
34	YDR304C	2	8	7	9112.53
35	YDR305C	0	6	10	3389.13
36	YDR306C	13	10	15	754.032
37	YDR307W	12	12	24	1906.23
38	YDR308C	2	3	5	1120.24
39	YDR309C	1	11	20	1214.85
40	YDR310C	3	19	56	12246.4
41	YDR311W	5	14	26	8486.1
42	YDR312W	2	12	31	5339.85
43	YDR313C	20	12	16	1538.65
44	YDR314C	6	17	41	363.903
45	YDR315C	9	9	8	284.182
46	YDR316W	6	8	36	3213.82
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48	YDR316W-	3	13	14	#N/A
49	YDR316W-I	14	63	70	#N/A
50	YDR317W	8	4	21	#N/A
51	YDR318W	1	8	16	1841.86
52	YDR319C	10	9	7	#N/A
53	YDR320C	2	9	19	9081.86
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2	YDR320C-A	1	2	3	18.052
3	YDR320W-I	3	1	3	#N/A
4	YDR321W	10	7	9	12981
5	YDR322C-A	1	1	3	1772.23
6	YDR322W	1	7	24	3255.47
7	YDR323C	19	17	32	991.418
8	YDR324C	13	12	37	13752.1
9	YDR325W	15	18	49	6685.29
10	YDR326C	6	40	56	9064.61
11	YDR327W	3	5	7	#N/A
12	YDR328C	1	4	13	3674.52
13	YDR329C	4	6	17	754.39
14	YDR330W	1	6	26	5946.73
15	YDR331W	4	14	16	1251.41
16	YDR332W	10	17	35	1044.04
17	YDR333C	5	18	34	6369.06
18	YDR334W	14	41	85	6043.51
19	YDR335W	23	18	53	7737.95
20	YDR336W	6	7	14	93.111
21	YDR337W	2	2	28	5527.89
22	YDR338C	9	15	32	620.585
23	YDR339C	6	4	12	1218.41
24	YDR340W	1	2	4	#N/A
25	YDR341C	3	14	28	31329.1
26	YDR342C	11	6	20	3462.39
27	YDR343C	11	6	20	140.152
28	YDR344C	9	6	10	#N/A
29	YDR345C	15	3	17	14908.8
30	YDR346C	3	13	10	18488.5
31	YDR347W	3	3	20	4784.67
32	YDR348C	0	15	38	4915.95
33	YDR349C	5	4	18	576.382
34	YDR350C	13	21	31	279.699
35	YDR351W	17	23	36	3419.92
36	YDR352W	6	3	13	271.288
37	YDR353W	4	5	10	20395.6
38	YDR354C-A	1	0	2	#N/A
39	YDR354W	5	17	6	5634.6
40	YDR355C	6	0	2	#N/A
41	YDR356W	2	14	69	9789.62
42	YDR357C	2	2	3	1614.48
43	YDR358W	4	6	22	5629.26
44	YDR359C	7	21	70	7086.85
45	YDR360W	1	0	10	#N/A
46	YDR361C	2	6	11	9175.79
47	YDR362C	11	15	30	1773.15
48	YDR363W	2	6	23	1648.52
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2	YDR363W-	0	0	2	641.912
3	YDR364C	7	21	22	2765.22
4	YDR365C	3	9	30	14380.7
5	YDR365W-	4	13	14	#N/A
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7	YDR365W-l	14	59	73	#N/A
8	YDR366C	3	6	4	#N/A
9	YDR367W	5	4	5	664.458
10	YDR368W	2	6	10	8930.39
11	YDR369C	9	13	44	2341.34
12					
13	YDR370C	12	13	21	1283.03
14	YDR371C-A	0	0	1	#N/A
15	YDR371W	5	16	18	2265.05
16	YDR372C	3	3	23	5314.7
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18	YDR373W	2	4	7	1025.32
19	YDR374C	1	8	18	#N/A
20	YDR374W-	1	1	6	#N/A
21	YDR375C	2	10	22	2774.1
22	YDR376W	5	10	26	3587.42
23					
24	YDR377W	0	6	5	1714.95
25	YDR378C	0	1	2	2493.5
26	YDR379C-A	0	6	6	321.362
27	YDR379W	21	28	54	4995.16
28	YDR380W	12	14	21	1576.16
29					
30	YDR381C-A	1	1	9	750.795
31	YDR381W	0	0	29	15656
32	YDR382W	0	0	1	11979.3
33	YDR383C	2	0	9	1754.45
34	YDR384C	9	2	7	1037.23
35					
36	YDR385W	8	16	41	124399
37	YDR386W	12	13	33	550.284
38	YDR387C	10	5	27	291.961
39	YDR388W	1	5	15	12554.4
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41	YDR389W	1	16	47	4264.09
42	YDR390C	11	7	23	11984
43	YDR391C	6	5	10	2347.17
44	YDR392W	2	9	23	1849.69
45	YDR393W	1	7	29	1461.37
46	YDR394W	0	4	30	11445
47					
48	YDR395W	11	14	27	15080.5
49	YDR396W	9	1	3	#N/A
50	YDR397C	0	3	6	418.71
51	YDR398W	7	13	24	9013.49
52	YDR399W	2	5	8	12464.2
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54	YDR400W	7	8	10	2354.12
55	YDR401W	3	8	10	#N/A
56	YDR402C	7	9	23	#N/A
57	YDR403W	12	18	23	#N/A
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2	YDR404C	4	4	6	1622.18
3	YDR405W	2	6	20	2009.65
4	YDR406W	29	29	73	8803.54
5	YDR406W-	0	6	3	#N/A
6	YDR407C	18	17	50	9697.25
7	YDR408C	5	7	6	6060.38
8	YDR409W	10	19	45	1937.05
9	YDR410C	3	11	7	427.83
10	YDR411C	5	4	21	1501.19
11	YDR412W	0	3	19	7356.55
12	YDR413C	10	1	6	#N/A
13	YDR414C	7	9	24	538.882
14	YDR415C	2	13	14	2897.48
15	YDR416W	14	14	43	2832.69
16	YDR417C	2	0	0	#N/A
17	YDR418W	1	2	8	41308.6
18	YDR419W	17	12	24	3290.06
19	YDR420W	5	24	30	#N/A
20	YDR421W	14	13	55	1138.3
21	YDR422C	4	34	42	1785.68
22	YDR423C	12	7	22	2903.69
23	YDR424C	0	3	1	2652.11
24	YDR425W	4	22	15	1324.55
25	YDR426C	7	2	5	#N/A
26	YDR427W	1	8	14	12140.5
27	YDR428C	5	5	10	1597.95
28	YDR429C	4	3	20	7479.69
29	YDR430C	6	27	39	12649.4
30	YDR431W	5	4	8	#N/A
31	YDR432W	1	11	38	19382.9
32	YDR433W	0	4	0	#N/A
33	YDR434W	4	13	11	3395.82
34	YDR435C	6	5	19	1159.24
35	YDR436W	13	19	53	2035.61
36	YDR437W	2	1	2	#N/A
37	YDR438W	5	5	10	#N/A
38	YDR439W	1	5	22	2229.53
39	YDR440W	10	10	29	3685.81
40	YDR441C	1	6	5	140.033
41	YDR442W	9	3	10	#N/A
42	YDR443C	15	35	38	2950.32
43	YDR444W	3	17	35	2351.4
44	YDR445C	3	5	4	#N/A
45	YDR446W	2	3	7	#N/A
46	YDR447C	1	1	17	33523.2
47	YDR448W	12	12	31	3182.93
48	YDR449C	5	8	22	12297.7
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2	YDR450W	1	7	16	30142.7
3	YDR451C	6	12	21	669.331
4	YDR452W	5	13	33	5802.55
5	YDR453C	2	2	6	3690.16
6	YDR454C	1	1	7	14277.2
7	YDR455C	3	3	3	#N/A
8	YDR456W	7	8	17	167.661
9	YDR457W	36	72	157	29645.2
10	YDR458C	10	11	29	6573.48
11	YDR459C	13	10	19	#N/A
12	YDR460W	8	4	22	4176.63
13	YDR461C-A	0	6	4	272.353
14	YDR461W	1	0	0	#N/A
15	YDR462W	1	3	13	1590.19
16	YDR463W	11	17	20	687.754
17	YDR464C-A	1	1	4	#N/A
18	YDR464W	3	32	71	2819.93
19	YDR465C	4	8	16	8215.71
20	YDR466W	5	23	40	4201.88
21	YDR467C	5	1	5	#N/A
22	YDR468C	2	4	12	3307.42
23	YDR469W	1	4	4	875.815
24	YDR470C	3	6	21	2076.42
25	YDR471W	0	6	8	20619.6
26	YDR472W	4	6	17	2952.4
27	YDR473C	5	14	35	4224.93
28	YDR475C	6	19	65	3112.54
29	YDR476C	3	6	11	1787.37
30	YDR477W	4	31	22	8097.07
31	YDR478W	6	3	7	285.94
32	YDR479C	2	10	26	1094.82
33	YDR480W	3	12	16	597.53
34	YDR481C	3	26	24	3200.22
35	YDR482C	1	5	15	1445.59
36	YDR483W	8	10	13	18054.2
37	YDR484W	6	9	24	4992.13
38	YDR485C	3	11	40	4380.71
39	YDR486C	0	1	5	1563.55
40	YDR487C	6	7	10	8801.68
41	YDR488C	9	9	34	1056.79
42	YDR489W	4	5	12	2288.65
43	YDR490C	5	14	38	4058.61
44	YDR491C	6	1	12	#N/A
45	YDR492W	11	12	9	1806.66
46	YDR493W	2	4	12	703.79
47	YDR494W	2	4	23	3132.79
48	YDR495C	16	19	30	4206.97
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2	YDR496C	5	17	31	15004.6
3	YDR497C	9	8	19	2896.7
4	YDR498C	5	9	16	3784.86
5	YDR499W	6	18	33	2122.3
6	YDR500C	4	6	11	19085.3
7	YDR501W	8	9	25	84.063
8	YDR502C	5	6	15	36940.5
9	YDR503C	10	7	14	454.148
10	YDR504C	6	2	5	#N/A
11	YDR505C	5	19	32	3396.64
12	YDR506C	7	22	19	2120.59
13	YDR507C	4	19	75	16126.8
14	YDR508C	13	10	27	8383.96
15	YDR509W	1	7	5	#N/A
16	YDR510C-A	1	0	1	#N/A
17	YDR510W	0	2	6	6074.81
18	YDR511W	0	6	8	663.881
19	YDR512C	5	2	8	1250.29
20	YDR513W	2	2	2	5826.1
21	YDR514C	10	13	24	2184.11
22	YDR515W	0	5	17	5460.09
23	YDR516C	9	13	28	4272.01
24	YDR517W	5	9	15	2504.86
25	YDR518W	5	15	14	5353.73
26	YDR519W	2	1	5	3951.27
27	YDR520C	16	21	37	888.339
28	YDR521W	1	1	4	#N/A
29	YDR522C	4	5	8	#N/A
30	YDR523C	8	9	21	#N/A
31	YDR524C	11	20	21	1637.76
32	YDR524C-A	2	0	0	#N/A
33	YDR524C-B	0	0	1	#N/A
34	YDR524W-i	0	0	2	#N/A
35	YDR525W	1	4	11	#N/A
36	YDR525W-,	1	4	3	#N/A
37	YDR526C	6	0	4	#N/A
38	YDR527W	4	10	14	7903.53
39	YDR528W	6	8	20	494.503
40	YDR529C	1	3	7	980.507
41	YDR530C	8	12	5	1680.89
42	YDR531W	3	10	9	2531.75
43	YDR532C	2	5	9	2205.41
44	YDR533C	1	5	4	2644.29
45	YDR534C	0	5	7	#N/A
46	YDR535C	8	8	9	#N/A
47	YDR536W	9	8	24	654.406
48	YDR537C	4	2	7	#N/A
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2	YDR538W	4	7	16	1013.72
3	YDR539W	11	15	14	3524.6
4	YDR540C	0	1	11	#N/A
5	YDR541C	3	14	13	215.148
6	YDR542W	0	2	4	#N/A
7	YDR543C	3	8	1	#N/A
8	YDR544C	2	14	6	#N/A
9	YDR545C-A	4	6	9	#N/A
10	YDR545W	36	31	120	9354.31
11	YEL001C	1	3	4	4908.53
12	YEL002C	4	8	17	6149.31
13	YEL003W	1	2	3	10412.8
14	YEL004W	9	7	12	75.908
15	YEL005C	5	7	5	742.422
16	YEL006W	2	6	12	221.969
17	YEL007W	1	18	11	2388.08
18	YEL008C-A	2	0	3	#N/A
19	YEL008W	5	4	5	#N/A
20	YEL009C	0	4	13	384.077
21	YEL009C-A	4	2	9	#N/A
22	YEL010W	4	0	7	#N/A
23	YEL011W	3	27	34	3078.96
24	YEL012W	1	4	4	1159
25	YEL013W	13	10	24	9449.1
26	YEL014C	3	4	7	#N/A
27	YEL015W	7	8	22	5334.71
28	YEL016C	5	15	20	#N/A
29	YEL017C-A	1	0	4	#N/A
30	YEL017W	6	4	10	5667.82
31	YEL018C-A	13	0	6	#N/A
32	YEL018W	0	7	14	2092.26
33	YEL019C	9	5	9	904.238
34	YEL020C	8	8	24	1736.27
35	YEL020C-B	6	2	2	#N/A
36	YEL020W-A	4	1	5	1258.85
37	YEL021W	4	4	14	#N/A
38	YEL022W	17	24	46	13416.1
39	YEL023C	13	17	36	#N/A
40	YEL024W	5	5	9	1526.13
41	YEL025C	30	24	51	2060.6
42	YEL026W	3	1	5	7587.98
43	YEL027W	6	0	4	535.899
44	YEL028W	1	6	6	#N/A
45	YEL029C	7	6	10	2305.9
46	YEL030C-A	2	1	6	#N/A
47	YEL030W	0	6	34	8916.53
48	YEL031W	13	21	44	33096.4
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2	YEL032C-A	5	6	8	#N/A
3	YEL032W	2	22	67	13412
4	YEL033W	5	4	5	#N/A
5	YEL034C-A	2	9	6	#N/A
6	YEL034W	2	5	4	31384.2
7	YEL035C	5	4	17	#N/A
8	YEL036C	1	14	25	9447.41
9	YEL037C	4	2	14	6859.91
10	YEL038W	1	4	5	3665.97
11	YEL039C	2	3	3	773.901
12	YEL040W	12	6	6	4076.38
13	YEL041W	10	9	27	1104.17
14	YEL042W	11	9	15	9557.28
15	YEL043W	5	22	27	3588.62
16	YEL044W	1	3	14	2578.99
17	YEL045C	10	6	10	#N/A
18	YEL046C	7	12	16	25142.4
19	YEL047C	5	9	17	11433.6
20	YEL048C	2	1	4	460.026
21	YEL049W	0	2	4	#N/A
22	YEL050C	7	10	41	2430.16
23	YEL050W-A	5	2	3	#N/A
24	YEL051W	0	1	21	9249.02
25	YEL052W	9	14	30	1874.45
26	YEL053C	12	16	22	2264.6
27	YEL053W-A	2	0	2	#N/A
28	YEL054C	1	2	8	#N/A
29	YEL055C	14	15	31	22584.2
30	YEL056W	2	15	12	4248.3
31	YEL057C	3	5	15	#N/A
32	YEL058W	12	15	20	9344.03
33	YEL059C-A	4	1	4	20.744
34	YEL059W	7	4	4	#N/A
35	YEL060C	4	27	18	3028.84
36	YEL061C	9	19	34	4694.64
37	YEL062W	12	9	29	1639.47
38	YEL063C	5	8	22	1185.1
39	YEL064C	11	11	17	105.228
40	YEL065W	11	14	22	101.472
41	YEL066W	0	5	8	1200.5
42	YEL067C	8	5	13	#N/A
43	YEL068C	4	4	7	#N/A
44	YEL069C	14	6	19	#N/A
45	YEL070W	7	13	20	154.094
46	YEL071W	6	14	17	18457.8
47	YEL072W	3	10	7	#N/A
48	YEL073C	0	2	2	#N/A
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2	YEL074W	2	6	4	#N/A
3	YEL075C	1	2	7	#N/A
4	YEL075W-A	6	9	19	#N/A
5	YEL076C	10	4	14	#N/A
6	YEL076C-A	7	4	15	#N/A
7	YEL077C	22	23	78	#N/A
8	YEL077W-A	4	6	9	#N/A
9	YER001W	10	24	36	18930.9
10	YER002W	0	1	20	8420.6
11	YER003C	5	11	15	26459.7
12	YER004W	2	5	13	4279.79
13	YER005W	11	17	35	3032.54
14	YER006C-A	0	3	4	#N/A
15	YER006W	2	6	29	16424.3
16	YER007C-A	2	5	4	5297.78
17	YER007W	7	8	24	1117.85
18	YER008C	9	28	73	8857.32
19	YER009W	0	2	5	5099.33
20	YER010C	3	4	9	942.052
21	YER011W	0	1	1	#N/A
22	YER012W	1	4	11	7031.75
23	YER013W	12	22	62	6397.67
24	YER014C-A	6	6	7	#N/A
25	YER014W	7	7	24	5521.83
26	YER015W	13	13	35	1731.22
27	YER016W	4	8	15	4652.52
28	YER017C	4	15	47	7439.86
29	YER018C	2	11	22	1631.09
30	YER019C-A	0	2	5	3272.05
31	YER019W	10	16	29	1401.71
32	YER020W	4	5	21	1396.98
33	YER021W	7	13	19	7674.85
34	YER022W	2	15	27	5184.74
35	YER023C-A	2	1	1	#N/A
36	YER023W	7	4	2	15322.5
37	YER024W	9	27	48	1054.13
38	YER025W	10	9	26	30379.3
39	YER026C	5	9	14	1305.7
40	YER027C	1	15	11	4106.81
41	YER028C	6	14	30	#N/A
42	YER029C	1	3	17	4666.25
43	YER030W	0	1	9	1608.68
44	YER031C	3	3	8	9258.33
45	YER032W	11	32	45	1583.56
46	YER033C	7	29	33	1101.98
47	YER034W	0	4	10	969.195
48	YER035W	1	7	8	#N/A
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2	YER036C	3	13	31	32856.8
3	YER037W	3	7	11	166.734
4	YER038C	9	8	16	955.967
5	YER038W-/	4	1	7	#N/A
6	YER039C	3	0	4	#N/A
7	YER039C-A	3	2	1	#N/A
8	YER040W	4	12	31	2662.31
9	YER041W	9	17	44	355.413
10	YER042W	5	5	7	8306.44
11	YER043C	11	16	15	60791.4
12	YER044C	2	3	6	831.309
13	YER044C-A	6	12	20	#N/A
14	YER045C	8	16	15	18.42
15	YER046W	1	3	8	530.719
16	YER046W-/	2	5	5	#N/A
17	YER047C	2	22	49	3429.76
18	YER048C	1	6	18	13929.9
19	YER048W-/	0	1	8	3842.98
20	YER049W	6	15	25	19232
21	YER050C	1	2	14	1700.35
22	YER051W	9	14	17	2333.82
23	YER052C	10	12	19	13045.4
24	YER053C	8	3	7	953.881
25	YER053C-A	0	1	2	#N/A
26	YER054C	5	13	28	1032.62
27	YER055C	5	2	14	19109.6
28	YER056C	7	5	11	3129.1
29	YER056C-A	4	2	13	15202.6
30	YER057C	2	3	3	3378.51
31	YER058W	1	3	8	965.304
32	YER059W	5	8	23	1556.95
33	YER060W	8	7	15	1108.45
34	YER060W-/	9	5	13	#N/A
35	YER061C	10	11	18	1050.74
36	YER062C	3	5	7	19649.7
37	YER063W	0	1	14	4357.07
38	YER064C	4	12	26	1490.79
39	YER065C	6	17	26	4176.9
40	YER066C-A	6	7	10	#N/A
41	YER066W	5	6	11	#N/A
42	YER067C-A	5	2	8	#N/A
43	YER067W	2	14	3	535.137
44	YER068C-A	6	0	0	#N/A
45	YER068W	12	21	24	11271.2
46	YER069W	8	15	36	8108.38
47	YER070W	14	17	42	35201.6
48	YER071C	1	2	2	559.98

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2	YER072W	1	1	10	1298.14
3	YER073W	6	8	20	18251.4
4	YER074W	0	1	14	31547.2
5	YER074W-/	0	0	6	560.277
6	YER075C	13	22	32	2677.93
7	YER076C	9	6	10	12.604
8	YER076W-/	5	3	10	#N/A
9	YER077C	12	12	37	2953.43
10	YER078C	7	12	28	5062.38
11	YER078W-/	3	2	3	#N/A
12	YER079C-A	1	4	4	#N/A
13	YER079W	1	6	6	1136.06
14	YER080W	5	11	24	10012.5
15	YER081W	5	11	13	15899.9
16	YER082C	2	22	28	13638.6
17	YER083C	0	4	10	2200.04
18	YER084W	3	4	7	#N/A
19	YER084W-/	6	8	7	#N/A
20	YER085C	3	3	21	#N/A
21	YER086W	5	18	32	16280.1
22	YER087C-A	12	7	4	#N/A
23	YER087C-B	0	1	3	3362.91
24	YER087W	15	13	28	4806.34
25	YER088C	4	24	31	8367.53
26	YER088C-A	2	2	13	#N/A
27	YER088W-I	4	2	6	#N/A
28	YER089C	12	15	17	9187.99
29	YER090C-A	0	3	1	#N/A
30	YER090W	6	12	25	19407.4
31	YER091C	3	12	33	83404.8
32	YER091C-A	4	1	4	#N/A
33	YER092W	0	1	5	814.264
34	YER093C	15	27	76	3532.2
35	YER093C-A	1	0	9	430.696
36	YER094C	4	2	8	895.36
37	YER095W	8	7	20	1641.56
38	YER096W	6	13	19	#N/A
39	YER097W	2	4	8	#N/A
40	YER098W	16	22	36	485.366
41	YER099C	6	11	15	5101.25
42	YER100W	1	5	11	515.294
43	YER101C	4	12	15	2243.6
44	YER102W	2	4	22	#N/A
45	YER103W	2	5	28	4252.25
46	YER104W	2	6	19	120.082
47	YER105C	21	24	63	19931.1
48	YER106W	6	9	16	#N/A
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2	YER107C	9	9	19	5741.05
3	YER107W-/	4	1	3	#N/A
4	YER110C	9	15	31	52692.7
5	YER111C	7	23	30	4436.99
6	YER112W	0	3	9	851.642
7	YER113C	14	14	25	1811.16
8	YER114C	2	14	61	6948.62
9	YER115C	9	6	12	#N/A
10	YER116C	9	7	17	80.693
11	YER117W	2	0	10	#N/A
12	YER118C	2	6	18	1851.33
13	YER119C	10	10	16	354.202
14	YER119C-A	3	1	10	73.245
15	YER120W	2	2	3	14028.3
16	YER121W	0	3	6	9.96
17	YER122C	4	6	21	15303.2
18	YER123W	13	18	31	4230.26
19	YER124C	15	11	9	712.038
20	YER125W	4	17	58	13819.4
21	YER126C	1	7	20	3281.3
22	YER127W	1	7	31	7384.92
23	YER128W	3	2	9	1773.26
24	YER129W	15	29	66	3277.07
25	YER130C	7	10	23	#N/A
26	YER131W	4	3	16	12651.9
27	YER132C	15	39	94	4540.26
28	YER133W	12	4	19	3664.8
29	YER133W-/	2	9	5	#N/A
30	YER134C	4	3	7	1780.01
31	YER135C	4	4	5	#N/A
32	YER136W	5	11	16	11938.3
33	YER137C	4	5	4	1628.82
34	YER137C-A	4	13	14	#N/A
35	YER137W-/	7	1	5	#N/A
36	YER138C	14	59	70	14152.6
37	YER138W-/	1	0	3	#N/A
38	YER139C	6	6	10	3416.3
39	YER140W	5	12	39	1661.96
40	YER141W	3	10	27	2916.23
41	YER142C	4	3	12	1938.67
42	YER143W	3	3	22	3613.4
43	YER144C	20	20	42	1891.95
44	YER145C	7	8	18	5816.39
45	YER145C-A	9	2	6	#N/A
46	YER146W	0	2	3	1538.63
47	YER147C	18	13	24	1986.93
48	YER147C-A	4	2	7	#N/A
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2	YER148W	2	2	15	4783.49
3	YER148W-/	10	1	4	#N/A
4	YER149C	1	11	18	6297.2
5	YER150W	3	1	1	#N/A
6	YER151C	6	29	23	20152.6
7	YER152C	6	10	24	3891.8
8	YER152W-/	8	4	21	#N/A
9	YER153C	1	6	25	476.886
10	YER154W	1	9	20	2433.87
11	YER155C	16	63	89	22357.4
12	YER156C	4	7	17	9714.97
13	YER157W	10	10	36	7366.35
14	YER158C	4	10	40	62.714
15	YER158W-/	0	2	10	#N/A
16	YER159C	1	2	5	1792.03
17	YER159C-A	3	13	14	#N/A
18	YER160C	15	64	71	#N/A
19	YER161C	0	5	28	2097.89
20	YER162C	14	13	54	3142.97
21	YER163C	0	11	14	1805.52
22	YER164W	6	31	87	17316.2
23	YER165C-A	10	2	4	#N/A
24	YER165W	3	9	22	51827.1
25	YER166W	25	25	84	10172.9
26	YER167W	4	23	37	1236.64
27	YER168C	5	14	21	8817.81
28	YER169W	10	25	30	3891.81
29	YER170W	0	3	13	373.014
30	YER171W	13	14	49	10160.7
31	YER172C	24	44	85	19175.3
32	YER172C-A	8	3	7	#N/A
33	YER173W	11	13	35	847.269
34	YER174C	2	3	8	3313.78
35	YER175C	3	7	15	641.598
36	YER175W-/	2	1	5	#N/A
37	YER176W	20	17	58	9200.39
38	YER177W	2	6	11	2845.86
39	YER178W	7	8	22	16598.6
40	YER179W	6	6	19	62.819
41	YER180C	2	6	18	#N/A
42	YER180C-A	1	0	4	#N/A
43	YER181C	3	4	4	158.419
44	YER182W	0	4	14	1995.58
45	YER183C	5	12	12	1440.06
46	YER184C	31	11	35	871.879
47	YER185W	4	3	12	#N/A
48	YER186C	9	5	15	#N/A
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2	YER187W	2	1	4	#N/A
3	YER188C-A	3	9	0	#N/A
4	YER188W	9	8	9	#N/A
5	YER189W	1	2	7	#N/A
6	YER190C-A	0	0	6	#N/A
7	YER190C-B	4	6	9	#N/A
9	YER190W	36	31	114	#N/A
10	YFL001W	9	8	25	4514.67
11	YFL002C	6	6	35	7155.38
12	YFL002W-A	15	64	73	6837.82
14	YFL002W-E	3	18	14	#N/A
15	YFL003C	17	15	37	#N/A
16	YFL004W	1	13	42	19959.2
17	YFL005W	3	1	7	7144.05
19	YFL007W	28	57	92	19869
20	YFL008W	6	18	60	14095.2
21	YFL009W	8	24	31	2289.32
22	YFL010C	0	3	5	6485.79
23	YFL010W-A	5	11	16	#N/A
24	YFL011W	12	2	25	39.352
26	YFL012W	3	5	9	#N/A
27	YFL012W-A	3	4	7	#N/A
28	YFL013C	4	7	31	6278.08
29	YFL013W-A	7	1	11	#N/A
31	YFL014W	0	2	3	2217.28
32	YFL015C	5	5	12	#N/A
33	YFL015W-A	3	4	9	#N/A
34	YFL016C	10	16	23	5590.8
35	YFL017C	4	2	5	4736.83
37	YFL017W-A	0	1	3	522.416
38	YFL018C	5	14	17	11387.1
39	YFL019C	1	3	6	#N/A
40	YFL020C	0	2	4	#N/A
41	YFL021C-A	14	3	20	#N/A
43	YFL021W	8	18	22	1260.54
44	YFL022C	1	12	19	31417.7
45	YFL023W	0	11	33	10737.3
46	YFL024C	5	22	55	4815.48
48	YFL025C	9	24	38	2309.75
49	YFL026W	2	4	16	#N/A
50	YFL027C	6	15	26	1158.37
51	YFL028C	3	7	18	6560.12
52	YFL029C	7	8	16	2496.63
54	YFL030W	6	10	13	1421.91
55	YFL031C-A	0	0	3	#N/A
56	YFL031W	4	5	16	#N/A
57	YFL032W	1	2	7	#N/A

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2	YFL033C	15	45	79	3744.5
3	YFL034C-A	0	1	4	12134.4
4	YFL034C-B	0	12	11	1470.62
5	YFL034W	15	22	51	6882.48
6	YFL036W	8	33	65	9870.65
7	YFL037W	6	11	19	12884.5
8	YFL038C	4	1	7	10259.7
9	YFL039C	4	10	18	53075
10	YFL040W	12	7	14	#N/A
11	YFL041W	4	27	23	2413.43
12	YFL041W-A	1	0	5	#N/A
13	YFL042C	7	12	29	1337.76
14	YFL044C	3	7	8	2226.44
15	YFL045C	3	4	13	21480.8
16	YFL046W	2	7	14	1004.28
17	YFL047W	13	16	28	9993.87
18	YFL048C	2	2	15	11011.2
19	YFL049W	2	14	20	5182.58
20	YFL050C	10	21	57	#N/A
21	YFL051C	5	1	6	#N/A
22	YFL052W	22	8	24	#N/A
23	YFL053W	2	12	18	#N/A
24	YFL054C	4	11	33	#N/A
25	YFL055W	5	9	22	#N/A
26	YFL058W	10	5	11	#N/A
27	YFL059W	5	6	11	642.252
28	YFL060C	5	7	9	419.7
29	YFL061W	3	6	13	79.769
30	YFL062W	8	3	17	#N/A
31	YFL063W	4	14	3	#N/A
32	YFL064C	3	3	10	#N/A
33	YFL065C	4	2	8	#N/A
34	YFL066C	9	6	21	#N/A
35	YFL067W	0	0	10	#N/A
36	YFL068W	4	6	9	#N/A
37	YFR001W	0	1	20	3175.43
38	YFR002W	5	15	38	10796.8
39	YFR003C	3	5	15	1282.92
40	YFR004W	1	8	12	9123.61
41	YFR005C	10	19	17	4857.78
42	YFR006W	10	17	29	8454.84
43	YFR007W	7	12	16	1173.52
44	YFR008W	0	6	10	951.445
45	YFR009W	5	18	38	19440.6
46	YFR009W-A	4	3	2	#N/A
47	YFR010W	5	7	21	13202.2
48	YFR010W-A	1	2	2	#N/A
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2	YFR011C	2	0	1	2320.64
3	YFR012W	8	5	8	#N/A
4	YFR012W-/	0	1	2	#N/A
5	YFR013W	4	15	38	6998.22
6	YFR014C	5	8	16	3623.12
7	YFR015C	7	21	39	1995.07
8	YFR016C	4	15	39	18425.8
9	YFR017C	2	7	15	186.152
10	YFR018C	3	15	22	510.582
11	YFR019W	26	60	106	5043.32
12	YFR020W	6	6	6	#N/A
13	YFR021W	4	10	23	2449.5
14	YFR022W	12	8	35	#N/A
15	YFR023W	5	15	31	288.448
16	YFR024C-A	1	1	39	5421.68
17	YFR025C	8	16	10	5554.76
18	YFR026C	6	2	5	#N/A
19	YFR027W	3	8	20	#N/A
20	YFR028C	7	18	31	4904.44
21	YFR029W	18	18	34	1304.81
22	YFR030W	2	15	28	11186.4
23	YFR031C	9	16	52	10994
24	YFR031C-A	0	10	26	39350
25	YFR032C	3	5	12	#N/A
26	YFR032C-A	0	6	4	4268.33
27	YFR032C-B	1	3	5	#N/A
28	YFR033C	2	7	3	974.844
29	YFR034C	1	13	18	2294.5
30	YFR034W-/	4	2	9	#N/A
31	YFR035C	10	0	5	#N/A
32	YFR036W	0	6	4	605.691
33	YFR036W-/	7	4	7	#N/A
34	YFR037C	7	14	21	10900.8
35	YFR038W	8	14	31	8255.17
36	YFR039C	6	12	17	4208.02
37	YFR040W	5	20	38	4399.95
38	YFR041C	2	3	11	6150.12
39	YFR042W	2	7	7	#N/A
40	YFR043C	4	8	10	613.866
41	YFR044C	5	9	11	13709.8
42	YFR045W	3	4	11	889.974
43	YFR046C	0	5	22	#N/A
44	YFR047C	9	7	9	2448.78
45	YFR048W	4	17	50	2295.43
46	YFR049W	2	5	6	1662.59
47	YFR050C	0	3	13	4257.28
48	YFR051C	1	14	25	7644.8

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2	YFR052C-A	4	4	4	#N/A
3	YFR052W	1	4	4	9704.34
4	YFR053C	4	9	18	8620.17
5	YFR054C	4	5	4	#N/A
6	YFR055W	4	9	13	#N/A
7	YFR056C	5	0	8	#N/A
8	YFR057W	2	4	6	#N/A
9	YGL001C	5	10	11	4356.22
10	YGL002W	3	4	12	1409.23
11	YGL003C	6	17	36	873.409
12	YGL004C	6	11	16	3083.23
13	YGL005C	1	3	11	3050.08
14	YGL006W	17	13	54	6575.44
15	YGL006W-/	0	5	2	#N/A
16	YGL007C-A	0	0	1	#N/A
17	YGL007W	2	2	10	#N/A
18	YGL008C	9	14	33	85980.8
19	YGL009C	11	17	33	45734.1
20	YGL010W	2	7	9	464.304
21	YGL011C	3	4	11	7833.02
22	YGL012W	12	15	12	5927.82
23	YGL013C	24	24	43	6191.98
24	YGL014C-A	1	7	9	#N/A
25	YGL014W	11	29	21	9513.26
26	YGL015C	4	4	5	#N/A
27	YGL016W	20	17	27	8742.25
28	YGL017W	15	12	21	3466.02
29	YGL018C	1	5	9	1319.36
30	YGL019W	9	8	13	2363.1
31	YGL020C	0	7	4	8160.04
32	YGL021W	6	21	38	3736.18
33	YGL022W	5	12	32	10661.5
34	YGL023C	8	18	34	4123.08
35	YGL024W	5	1	5	#N/A
36	YGL025C	2	8	11	1481.47
37	YGL026C	7	19	28	28610.5
38	YGL027C	8	18	33	15573.1
39	YGL028C	6	4	3	396.446
40	YGL029W	0	1	15	1782.35
41	YGL030W	0	0	3	16985.4
42	YGL031C	0	2	16	17737.7
43	YGL032C	3	1	1	#N/A
44	YGL033W	3	1	6	#N/A
45	YGL034C	4	1	9	#N/A
46	YGL035C	4	17	29	2898.73
47	YGL036W	8	21	19	6568.09
48	YGL037C	2	12	7	4249.54
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2	YGL038C	1	11	18	4972.76
3	YGL039W	9	5	6	5015.15
4	YGL040C	9	9	21	4080.48
5	YGL041C	2	1	3	#N/A
6	YGL041C-B	3	2	2	#N/A
7	YGL041W-/	0	4	12	1348.19
8	YGL042C	2	4	3	#N/A
9	YGL043W	7	10	11	11379.8
10	YGL044C	4	1	10	2966.15
11	YGL045W	6	6	29	1261.83
12	YGL047W	6	4	9	805.024
13	YGL048C	4	8	27	11679.7
14	YGL049C	5	19	47	20921
15	YGL050W	5	2	15	4020.99
16	YGL051W	2	4	15	#N/A
17	YGL052W	3	7	9	#N/A
18	YGL053W	4	4	7	438.91
19	YGL054C	2	4	3	2139.3
20	YGL055W	4	21	22	10923.4
21	YGL056C	4	18	21	2163.55
22	YGL057C	0	4	12	1958.81
23	YGL058W	1	3	8	1648.04
24	YGL059W	5	17	20	744.771
25	YGL060W	12	14	18	4108.93
26	YGL061C	1	6	15	1840.27
27	YGL062W	12	29	66	4777.58
28	YGL063C-A	1	0	5	#N/A
29	YGL063W	11	11	28	132.358
30	YGL064C	2	10	27	2872.75
31	YGL065C	6	10	15	5504.38
32	YGL066W	7	18	31	4239.3
33	YGL067W	13	6	16	2452.05
34	YGL068W	0	1	5	5074.89
35	YGL069C	6	0	4	#N/A
36	YGL070C	8	3	12	1347.63
37	YGL071W	8	38	25	2352.47
38	YGL072C	4	4	8	#N/A
39	YGL073W	0	22	39	5305.52
40	YGL074C	5	1	2	#N/A
41	YGL075C	2	5	24	1170.67
42	YGL076C	0	4	15	37819.4
43	YGL077C	16	14	12	3650.65
44	YGL078C	3	11	20	20029.4
45	YGL079W	1	3	8	945.246
46	YGL080W	1	2	3	256.065
47	YGL081W	9	8	17	#N/A
48	YGL082W	3	7	19	3442.85
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2	YGL083W	8	13	21	4504.75
3	YGL084C	6	14	29	1952.69
4	YGL085W	2	5	22	452.622
5	YGL086W	7	7	27	8365.08
6	YGL087C	3	3	7	1429.07
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8	YGL088W	3	2	6	#N/A
9	YGL089C	0	3	3	1350.38
10	YGL090W	6	5	25	728.761
11	YGL091C	11	6	5	3423.06
12	YGL092W	14	12	47	18589.4
13	YGL093W	1	16	46	2975.69
14	YGL094C	21	25	54	3436.8
15	YGL095C	5	11	31	5255.67
16	YGL096W	0	8	18	33.595
17	YGL097W	9	15	19	10428.2
18	YGL098W	0	3	12	1580.99
19	YGL099W	4	11	38	24037.8
20	YGL100W	8	11	15	5020.76
21	YGL101W	6	5	12	6921.81
22	YGL102C	3	3	3	#N/A
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24	YGL103W	0	10	12	40841.5
25	YGL104C	11	8	20	40.243
26	YGL105W	3	11	11	28690.8
27	YGL106W	0	0	5	9513.98
28	YGL107C	5	13	32	4995.98
29	YGL108C	1	3	10	1667.93
30	YGL109W	5	4	8	#N/A
31	YGL110C	3	16	37	4042.83
32	YGL111W	3	8	16	8500.22
33	YGL112C	2	10	19	6766.31
34	YGL113W	7	11	47	406.184
35	YGL114W	11	7	32	1047.62
36	YGL115W	4	4	17	5147.38
37	YGL116W	10	14	34	243.665
38	YGL117W	4	10	14	931.03
39	YGL118C	3	6	5	#N/A
40	YGL119W	6	8	30	1993.45
41	YGL120C	7	22	48	20115
42	YGL121C	0	3	10	84.704
43	YGL122C	21	12	27	9973.47
44	YGL123C-A	4	1	2	#N/A
45	YGL123W	1	3	18	26343.6
46	YGL124C	13	14	26	1917.17
47	YGL125W	10	17	22	6890.12
48	YGL126W	10	19	28	1074.01
49	YGL127C	3	0	2	565.963
50	YGL128C	2	15	14	168.546
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2	YGL129C	1	9	14	5483.44
3	YGL130W	8	8	23	4972.81
4	YGL131C	52	30	72	530.895
5	YGL132W	3	0	1	#N/A
6	YGL133W	14	19	68	10181.4
7	YGL134W	10	10	15	340.276
8	YGL135W	4	2	9	30206.9
9	YGL136C	3	10	24	1870.49
10	YGL137W	6	14	30	22817.7
11	YGL138C	5	8	14	#N/A
12	YGL139W	10	12	33	3115.41
13	YGL140C	19	25	57	6365.53
14	YGL141W	9	17	44	3728.37
15	YGL142C	4	17	27	1066.64
16	YGL143C	2	10	28	2001.5
17	YGL144C	2	17	26	862.2
18	YGL145W	5	12	20	7724.44
19	YGL146C	4	5	14	46.646
20	YGL147C	1	5	11	41776
21	YGL148W	5	8	22	25377.4
22	YGL149W	3	4	3	#N/A
23	YGL150C	9	30	82	10950.7
24	YGL151W	11	19	28	9182.77
25	YGL152C	11	2	6	#N/A
26	YGL153W	0	1	12	4900.76
27	YGL154C	8	2	8	403.363
28	YGL155W	17	13	16	1352.7
29	YGL156W	17	27	48	2381.18
30	YGL157W	8	7	3	12303.3
31	YGL158W	12	12	20	#N/A
32	YGL159W	11	10	10	3075.78
33	YGL160W	8	16	26	1977.08
34	YGL161C	2	4	12	696.438
35	YGL162W	8	4	18	389.836
36	YGL163C	17	21	61	453.686
37	YGL164C	0	2	21	4534.02
38	YGL165C	8	2	12	#N/A
39	YGL166W	12	8	16	15.228
40	YGL167C	14	13	35	13472.4
41	YGL168W	1	4	0	#N/A
42	YGL169W	5	9	21	4088.71
43	YGL170C	3	11	18	16.463
44	YGL171W	9	8	33	12616
45	YGL172W	2	5	6	4468.15
46	YGL173C	6	43	65	56393.5
47	YGL174W	0	7	11	2111.56
48	YGL175C	5	6	22	510.966
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2	YGL176C	9	14	26	211.876
3	YGL177W	3	4	9	#N/A
4	YGL178W	10	25	20	2619.59
5	YGL179C	10	11	25	175.928
6	YGL180W	12	25	37	2028.52
7	YGL181W	5	7	27	4409.77
8	YGL182C	2	2	4	#N/A
9	YGL183C	4	1	9	#N/A
10	YGL184C	10	12	20	1299.42
11	YGL185C	11	14	22	4940.43
12	YGL186C	13	10	21	99.644
13	YGL187C	4	4	8	1606.56
14	YGL188C	3	2	4	#N/A
15	YGL188C-A	2	2	2	#N/A
16	YGL189C	4	3	16	5133.18
17	YGL190C	5	15	22	7917.92
18	YGL191W	1	7	6	1266.71
19	YGL192W	13	19	26	#N/A
20	YGL193C	5	2	7	#N/A
21	YGL194C	8	16	18	1109.49
22	YGL194C-A	2	0	4	#N/A
23	YGL195W	26	35	110	62005
24	YGL196W	13	11	15	4112.16
25	YGL197W	16	26	78	7039.35
26	YGL198W	4	5	9	546.105
27	YGL199C	7	1	7	#N/A
28	YGL200C	3	6	13	2191.2
29	YGL201C	12	17	66	13159.8
30	YGL202W	4	10	16	22551
31	YGL203C	7	17	16	9350.26
32	YGL204C	1	1	5	619.019
33	YGL205W	8	15	35	2980.3
34	YGL206C	14	30	52	43506
35	YGL207W	9	9	51	30039.3
36	YGL208W	4	8	22	821.673
37	YGL209W	4	20	21	#N/A
38	YGL210W	3	3	8	2125.14
39	YGL211W	13	6	22	1944.74
40	YGL212W	1	4	33	2424.5
41	YGL213C	9	14	15	5589.69
42	YGL214W	4	5	5	#N/A
43	YGL215W	0	11	10	#N/A
44	YGL216W	11	17	53	2816.24
45	YGL217C	1	0	2	#N/A
46	YGL218W	7	1	10	#N/A
47	YGL219C	6	7	21	425.064
48	YGL220W	3	4	8	773.929
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2	YGL221C	6	8	10	4538.82
3	YGL222C	1	4	9	614.489
4	YGL223C	5	10	12	4495.64
5	YGL224C	5	10	11	2170.44
6	YGL225W	6	2	7	3361.08
7	YGL226C-A	1	2	0	1320.96
8	YGL226W	1	1	11	227.803
9	YGL227W	7	11	41	2273.71
10	YGL228W	9	12	27	10072.1
11	YGL229C	9	24	25	1183.84
12	YGL230C	5	2	5	#N/A
13	YGL231C	0	2	4	6480.69
14	YGL232W	7	4	14	7102.9
15	YGL233W	7	10	30	4301.98
16	YGL234W	6	17	28	22357.6
17	YGL235W	8	5	8	#N/A
18	YGL236C	9	13	38	2725.03
19	YGL237C	0	7	18	232.558
20	YGL238W	2	14	32	11449.8
21	YGL239C	4	1	2	#N/A
22	YGL240W	3	11	11	1036.11
23	YGL241W	17	12	28	4879.52
24	YGL242C	2	4	6	1298.81
25	YGL243W	11	7	27	2466.26
26	YGL244W	2	9	45	10282.9
27	YGL245W	7	14	36	56410.5
28	YGL246C	7	8	22	3027.12
29	YGL247W	4	4	15	387.222
30	YGL248W	7	13	16	1361.76
31	YGL249W	13	13	29	#N/A
32	YGL250W	1	5	10	898.772
33	YGL251C	26	31	49	#N/A
34	YGL252C	10	13	39	7977.3
35	YGL253W	4	5	19	45336.7
36	YGL254W	12	18	12	1992.36
37	YGL255W	6	7	13	2664.09
38	YGL256W	6	12	7	1258.61
39	YGL257C	7	16	19	1575.33
40	YGL258W	6	2	3	#N/A
41	YGL258W-/	1	2	3	#N/A
42	YGL259W	2	1	4	#N/A
43	YGL260W	5	2	6	#N/A
44	YGL261C	0	2	4	#N/A
45	YGL262W	2	2	5	#N/A
46	YGL263W	8	7	14	#N/A
47	YGR001C	5	5	8	9717.9
48	YGR002C	2	8	24	4325.56
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2	YGR003W	10	15	30	4506.65
3	YGR004W	2	8	30	1770.35
4	YGR005C	3	7	26	8395.32
5	YGR006W	2	7	12	696.775
6	YGR007W	9	13	14	2651.83
7	YGR008C	0	3	4	290.945
8	YGR009C	0	6	42	6532.93
9	YGR010W	4	13	22	2824.96
10	YGR011W	5	1	4	#N/A
11	YGR012W	8	10	17	7133.95
12	YGR013W	4	17	35	3449.71
13	YGR014W	2	8	11	1024.08
14	YGR015C	5	11	17	483.785
15	YGR016W	4	3	11	108.473
16	YGR017W	8	6	14	3953.3
17	YGR018C	5	6	3	#N/A
18	YGR019W	8	12	17	4441.66
19	YGR020C	0	3	6	7173
20	YGR021W	2	3	11	1359.28
21	YGR022C	2	1	4	#N/A
22	YGR023W	3	6	7	779.848
23	YGR024C	6	5	7	1766.13
24	YGR025W	3	0	7	#N/A
25	YGR026W	1	6	10	1379.6
26	YGR027C	0	3	7	14303.4
27	YGR027W-	4	15	14	#N/A
28	YGR027W-	15	63	71	#N/A
29	YGR028W	3	2	18	2207.07
30	YGR029W	6	3	10	1576.31
31	YGR030C	2	3	6	379.972
32	YGR031C-A	6	2	13	#N/A
33	YGR031W	5	12	21	1876.53
34	YGR032W	32	43	101	23888.5
35	YGR033C	1	7	17	3991.26
36	YGR034W	0	2	12	21708
37	YGR035C	1	2	11	#N/A
38	YGR035W-	3	2	4	#N/A
39	YGR036C	5	4	10	128.139
40	YGR037C	0	0	1	4166
41	YGR038C-A	3	14	14	#N/A
42	YGR038C-B	13	62	71	#N/A
43	YGR038W	1	7	10	257.425
44	YGR039W	0	4	6	#N/A
45	YGR040W	6	10	17	2374.15
46	YGR041W	4	13	32	2746.07
47	YGR042W	1	8	18	483.087
48	YGR043C	2	8	11	3075.02
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2	YGR044C	12	13	14	443.517
3	YGR045C	4	2	5	#N/A
4	YGR046W	2	9	17	1172.94
5	YGR047C	9	18	67	7150.44
6	YGR048W	2	2	11	4302.83
7	YGR049W	7	6	3	1753.3
8	YGR050C	1	3	7	#N/A
9	YGR051C	7	2	9	#N/A
10	YGR052W	11	9	11	#N/A
11	YGR053C	7	8	14	139.098
12	YGR054W	9	13	21	21592.7
13	YGR055W	6	5	13	874.204
14	YGR056W	9	19	48	7116.79
15	YGR057C	5	7	13	185.751
16	YGR058W	2	11	20	1378.89
17	YGR059W	10	8	29	#N/A
18	YGR060W	5	18	10	2317.3
19	YGR061C	22	24	52	40935.5
20	YGR062C	2	2	21	210.123
21	YGR063C	6	2	4	2329.82
22	YGR064W	6	8	11	#N/A
23	YGR065C	13	10	27	1853.69
24	YGR066C	6	10	14	#N/A
25	YGR067C	14	22	26	439.678
26	YGR068C	6	15	30	4273.95
27	YGR068W-	1	1	0	#N/A
28	YGR069W	4	5	5	#N/A
29	YGR070W	22	38	48	1574.25
30	YGR071C	14	29	28	1747.96
31	YGR072W	4	4	21	3605.62
32	YGR073C	7	0	5	#N/A
33	YGR074W	0	0	12	3428.97
34	YGR075C	4	7	5	108.725
35	YGR076C	0	4	7	1691.81
36	YGR077C	7	19	20	1426.49
37	YGR078C	3	2	9	4007.66
38	YGR079W	7	7	17	#N/A
39	YGR080W	2	4	13	3942.7
40	YGR081C	0	1	17	4555.44
41	YGR082W	0	1	9	4044.71
42	YGR083C	4	7	23	7267.03
43	YGR084C	1	9	18	2025.61
44	YGR085C	1	3	16	19284.2
45	YGR086C	0	4	20	14411.1
46	YGR087C	1	12	12	27187.2
47	YGR088W	9	16	23	1116.89
48	YGR089W	10	25	32	3588.07
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2	YGR090W	11	29	39	29102.4
3	YGR091W	4	14	22	2216.26
4	YGR092W	6	11	40	4071.65
5	YGR093W	9	11	18	4319.19
6	YGR094W	13	24	42	59157.1
7	YGR095C	8	3	10	1165.12
8	YGR096W	1	7	19	348.252
9	YGR097W	7	32	37	5343.02
10	YGR098C	30	41	52	1392.89
11	YGR099W	7	14	35	3555.37
12	YGR100W	10	16	50	5524.66
13	YGR101W	3	6	18	198.264
14	YGR102C	2	7	10	1049.55
15	YGR103W	4	6	26	29320.9
16	YGR104C	2	4	10	1109.5
17	YGR105W	0	1	2	#N/A
18	YGR106C	4	3	1	1918.72
19	YGR107W	4	2	12	#N/A
20	YGR108W	8	10	21	572.428
21	YGR109C	11	12	15	#N/A
22	YGR109W-	6	8	24	#N/A
23	YGR109W-	20	45	98	346.859
24	YGR110W	5	12	32	287.509
25	YGR111W	6	13	14	5378.47
26	YGR112W	4	9	27	1320.59
27	YGR113W	1	6	24	1039.47
28	YGR114C	5	3	8	#N/A
29	YGR115C	7	0	5	#N/A
30	YGR116W	7	33	74	31898.3
31	YGR117C	5	10	16	4960.61
32	YGR118W	2	2	12	15878.6
33	YGR119C	1	3	12	9341.65
34	YGR120C	4	6	9	3360.16
35	YGR121C	8	8	18	578.729
36	YGR121W-	3	1	4	#N/A
37	YGR122C-A	2	1	0	#N/A
38	YGR122W	8	4	13	2122.43
39	YGR123C	9	14	24	13941.7
40	YGR124W	9	20	28	27243.7
41	YGR125W	12	18	48	2471.65
42	YGR126W	0	12	8	349.583
43	YGR127W	4	5	16	1305.94
44	YGR128C	11	10	16	12577.5
45	YGR129W	0	2	15	1158.88
46	YGR130C	1	14	27	10281.9
47	YGR131W	5	3	9	#N/A
48	YGR132C	0	4	15	3511.34
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2	YGR133W	6	5	10	310.531
3	YGR134W	15	24	49	3220.6
4	YGR135W	0	3	12	11589
5	YGR136W	0	0	6	3686.4
6	YGR137W	2	10	10	#N/A
7	YGR138C	13	6	21	1306.43
8	YGR139W	5	1	3	#N/A
9	YGR140W	11	25	40	4920.01
10	YGR141W	7	13	28	720.441
11	YGR142W	5	7	19	8.61
12	YGR143W	6	17	30	1705.12
13	YGR144W	6	12	9	43.199
14	YGR145W	5	12	55	14522.1
15	YGR146C	4	8	7	#N/A
16	YGR146C-A	4	2	1	#N/A
17	YGR147C	4	6	19	2910.92
18	YGR148C	0	2	17	7110.49
19	YGR149W	7	18	20	1553.07
20	YGR150C	9	21	44	2828.08
21	YGR151C	0	6	9	#N/A
22	YGR152C	2	2	15	4901.49
23	YGR153W	8	5	15	#N/A
24	YGR154C	3	9	19	#N/A
25	YGR155W	1	7	15	54155.3
26	YGR156W	1	4	13	3043.24
27	YGR157W	8	18	33	19908.9
28	YGR158C	5	4	10	5058.4
29	YGR159C	1	3	24	24008.5
30	YGR160W	3	2	1	#N/A
31	YGR161C	2	10	27	270.791
32	YGR161C-C	3	13	14	#N/A
33	YGR161C-D	15	61	71	#N/A
34	YGR161W-	3	18	14	#N/A
35	YGR161W-	15	64	73	#N/A
36	YGR161W-	1	3	2	#N/A
37	YGR162W	4	14	57	40572.4
38	YGR163W	4	5	12	2110.02
39	YGR164W	4	5	10	#N/A
40	YGR165W	1	9	24	4952.62
41	YGR166W	7	10	21	2024.76
42	YGR167W	0	2	10	12031.7
43	YGR168C	4	11	18	161.888
44	YGR169C	7	14	25	1331.67
45	YGR169C-A	0	1	9	4087.05
46	YGR170W	15	28	63	1817.69
47	YGR171C	8	15	28	3263.19
48	YGR172C	2	6	2	397.715
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2	YGR173W	5	10	20	12863.8
3	YGR174C	1	2	14	1046.23
4	YGR174W-	0	0	1	#N/A
5	YGR175C	7	11	24	11819.5
6	YGR176W	6	3	20	#N/A
7	YGR177C	8	16	23	4844.79
8	YGR178C	1	21	30	10729
9	YGR179C	1	13	24	1775.35
10	YGR180C	2	6	9	20797.3
11	YGR181W	4	0	3	3139.9
12	YGR182C	4	4	7	#N/A
13	YGR183C	0	1	2	98.043
14	YGR184C	43	51	92	13718.5
15	YGR185C	4	5	10	24579.7
16	YGR186W	2	7	44	15378.2
17	YGR187C	7	6	17	8907.47
18	YGR188C	7	20	51	2169.23
19	YGR189C	2	3	6	2244.61
20	YGR190C	3	0	5	#N/A
21	YGR191W	9	8	24	6018.36
22	YGR192C	2	8	11	187872
23	YGR193C	2	4	8	8681.36
24	YGR194C	15	16	26	2868.58
25	YGR195W	0	6	18	3356.92
26	YGR196C	1	16	26	6914.52
27	YGR197C	7	7	25	911.5
28	YGR198W	11	14	24	6246.5
29	YGR199W	13	26	26	2540.88
30	YGR200C	15	22	36	10915.7
31	YGR201C	3	4	15	249.414
32	YGR202C	4	7	28	3612.5
33	YGR203W	2	6	14	1726.18
34	YGR204C-A	0	0	3	#N/A
35	YGR204W	7	22	41	41389.1
36	YGR205W	4	6	8	2002.82
37	YGR206W	3	1	5	1393.98
38	YGR207C	3	1	9	5426
39	YGR208W	8	4	6	3995.47
40	YGR209C	2	0	1	16339.9
41	YGR210C	5	7	20	10039.2
42	YGR211W	15	8	22	20368.7
43	YGR212W	8	16	14	1573.79
44	YGR213C	3	4	12	#N/A
45	YGR214W	1	5	15	23794.7
46	YGR215W	0	1	7	828.993
47	YGR216C	10	11	23	210.094
48	YGR217W	26	33	108	3287.34
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2	YGR218W	12	20	38	22976.2
3	YGR219W	4	6	5	#N/A
4	YGR220C	2	11	16	1890.45
5	YGR221C	7	15	29	#N/A
6	YGR222W	0	6	15	2082.81
7	YGR223C	8	12	28	762.883
8	YGR224W	9	5	15	#N/A
9	YGR225W	16	15	29	#N/A
10	YGR226C	4	2	5	#N/A
11	YGR227W	8	11	20	538.315
12	YGR228W	7	1	1	#N/A
13	YGR229C	1	13	14	11161.3
14	YGR230W	3	5	11	#N/A
15	YGR231C	1	3	27	4079.89
16	YGR232W	4	9	4	5308.84
17	YGR233C	13	30	38	5246.89
18	YGR234W	4	15	10	18295.3
19	YGR235C	2	3	17	1370.52
20	YGR236C	0	1	6	255.308
21	YGR237C	3	28	49	2455.6
22	YGR238C	9	22	39	3601.78
23	YGR239C	5	10	17	391.862
24	YGR240C	12	23	49	57455.2
25	YGR240C-A	0	5	0	#N/A
26	YGR241C	1	14	19	3563.18
27	YGR242W	3	0	6	#N/A
28	YGR243W	1	4	7	345.701
29	YGR244C	5	8	18	5782.13
30	YGR245C	8	15	46	12033.2
31	YGR246C	9	15	35	3004.47
32	YGR247W	6	8	11	605.903
33	YGR248W	6	5	7	595.735
34	YGR249W	1	13	11	#N/A
35	YGR250C	5	20	26	3479.74
36	YGR251W	0	4	10	737.586
37	YGR252W	3	9	22	3884.31
38	YGR253C	3	6	11	6210.2
39	YGR254W	1	11	14	126916
40	YGR255C	3	9	26	4799.09
41	YGR256W	6	11	24	9696.05
42	YGR257C	9	4	19	352.836
43	YGR258C	4	10	51	2155.48
44	YGR259C	3	1	10	#N/A
45	YGR260W	13	7	18	2427.31
46	YGR261C	12	15	35	10498
47	YGR262C	3	11	17	1273.65
48	YGR263C	9	12	15	1560.04
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2	YGR264C	10	22	24	52595.1
3	YGR265W	3	2	11	#N/A
4	YGR266W	12	27	30	6396.93
5	YGR267C	3	8	19	4437.22
6	YGR268C	8	6	18	755.645
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8	YGR269W	3	4	7	#N/A
9	YGR270C-A	6	2	2	#N/A
10	YGR270W	8	21	86	14718.4
11	YGR271C-A	1	2	16	4208.03
12	YGR271W	21	52	93	9484.94
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14	YGR273C	2	3	13	#N/A
15	YGR274C	4	28	43	8220.35
16	YGR275W	1	1	7	2387.98
17	YGR276C	6	15	21	5227.95
18	YGR277C	8	11	13	5063.49
19	YGR278W	7	13	39	2866.66
20	YGR279C	5	3	6	7277.79
21	YGR280C	1	9	16	4083.29
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23	YGR281W	17	19	72	12116.9
24	YGR282C	4	2	4	6054.38
25	YGR283C	6	10	10	2152.39
26	YGR284C	3	2	9	4515.31
27	YGR285C	1	7	26	31085.6
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29	YGR286C	10	10	18	7771.98
30	YGR287C	5	14	25	739.904
31	YGR288W	19	11	25	154.934
32	YGR289C	14	2	20	#N/A
33	YGR290W	3	1	2	#N/A
34	YGR291C	3	1	4	#N/A
35	YGR292W	5	14	26	#N/A
36	YGR293C	5	6	7	#N/A
37	YGR294W	0	2	4	#N/A
38	YGR295C	6	4	18	1062.86
39	YGR296C-A	0	0	6	#N/A
40	YGR296C-B	4	6	9	#N/A
41	YGR296W	39	34	120	283.354
42	YHL001W	1	0	11	23523.9
43	YHL002C-A	9	0	7	#N/A
44	YHL002W	2	10	20	3682.92
45	YHL003C	5	9	20	4003.69
46	YHL004W	0	6	23	3877.35
47	YHL005C	4	4	9	#N/A
48	YHL006C	1	3	11	536.783
49	YHL006W-/	8	0	7	#N/A
50	YHL007C	7	21	30	12130.1
51	YHL008C	3	18	33	1148.08
52	YHL009C	7	5	16	3544.83
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2	YHL009W-/	10	7	23	33.617
3	YHL009W-f	27	49	85	#N/A
4	YHL010C	16	16	23	1228.37
5	YHL011C	5	6	21	7661.42
6	YHL012W	8	9	16	#N/A
7	YHL013C	6	9	14	7034.5
8	YHL014C	4	10	16	1797.59
9	YHL015W	0	2	6	30310.3
10	YHL015W-/	0	1	3	#N/A
11	YHL016C	11	9	17	#N/A
12	YHL017W	13	9	15	1238.55
13	YHL018W	1	8	7	508.087
14	YHL019C	9	13	25	1698.85
15	YHL019W-/	12	2	14	#N/A
16	YHL020C	4	8	16	4301.31
17	YHL021C	7	13	23	1320.17
18	YHL022C	10	11	15	#N/A
19	YHL023C	15	36	52	1794.17
20	YHL024W	5	22	36	414.994
21	YHL025W	1	9	19	3467.98
22	YHL026C	3	8	9	227.649
23	YHL027W	18	19	24	1564.8
24	YHL028W	12	9	15	#N/A
25	YHL029C	6	21	17	2240.52
26	YHL030W	23	23	72	19238.2
27	YHL030W-/	12	0	5	#N/A
28	YHL031C	2	4	14	3341.47
29	YHL032C	12	13	37	1164.11
30	YHL033C	1	3	12	53198.7
31	YHL034C	1	7	25	13687.4
32	YHL034W-/	4	0	1	#N/A
33	YHL035C	23	23	81	#N/A
34	YHL036W	9	8	13	#N/A
35	YHL037C	7	6	10	#N/A
36	YHL038C	8	12	33	3152.02
37	YHL039W	7	7	18	8009.16
38	YHL040C	10	11	26	91.916
39	YHL041W	4	8	7	#N/A
40	YHL042W	5	3	10	#N/A
41	YHL043W	4	3	11	#N/A
42	YHL044W	7	4	12	#N/A
43	YHL045W	8	0	7	#N/A
44	YHL046C	0	2	4	#N/A
45	YHL046W-/	1	0	6	#N/A
46	YHL047C	9	6	26	87.912
47	YHL048C-A	2	2	3	#N/A
48	YHL048W	6	3	15	1204.79
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2	YHL049C	6	6	18	#N/A
3	YHL050C	12	11	43	#N/A
4	YHL050W-/	4	6	9	#N/A
5	YHR001W	1	14	18	8519.67
6	YHR001W-	0	3	2	175.347
7	YHR002W	5	11	24	782.27
8	YHR003C	9	9	24	5070.59
9	YHR004C	4	11	20	1349.36
10	YHR005C	8	5	26	5722.48
11	YHR005C-A	4	0	1	2294.19
12	YHR006W	11	12	21	721.076
13	YHR007C	4	18	25	13888.6
14	YHR007C-A	1	4	5	#N/A
15	YHR008C	1	6	5	2416.57
16	YHR009C	9	19	19	5299.59
17	YHR010W	0	6	8	#N/A
18	YHR011W	8	4	21	2072.43
19	YHR012W	5	3	6	2854.62
20	YHR013C	2	7	13	6954.86
21	YHR014W	1	5	16	#N/A
22	YHR015W	10	11	29	#N/A
23	YHR016C	1	7	40	1646.01
24	YHR017W	6	12	20	1704.98
25	YHR018C	4	13	25	11768.1
26	YHR019C	9	10	27	33716.7
27	YHR020W	9	13	26	39349.5
28	YHR021C	5	3	4	8262
29	YHR021W-	1	4	6	#N/A
30	YHR022C	7	5	14	#N/A
31	YHR022C-A	0	0	3	#N/A
32	YHR023W	14	31	83	21976.4
33	YHR024C	6	11	19	5182.99
34	YHR025W	8	4	17	4311.64
35	YHR026W	3	2	3	3473.54
36	YHR027C	8	22	25	33259.6
37	YHR028C	1	24	32	6893.65
38	YHR028W-	2	1	5	#N/A
39	YHR029C	4	5	6	2790.22
40	YHR030C	9	13	21	3429.67
41	YHR031C	4	10	47	1818.7
42	YHR032C-A	4	1	1	#N/A
43	YHR032W	17	13	25	257.418
44	YHR032W-	1	6	4	160.304
45	YHR033W	3	11	19	244.653
46	YHR034C	10	8	20	1723.68
47	YHR035W	20	14	29	#N/A
48	YHR036W	6	11	18	1629.63

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2	YHR037W	5	9	21	7842.38
3	YHR038W	1	2	11	2690.58
4	YHR039C	16	12	21	9278.48
5	YHR039C-A	0	2	2	14320.5
6	YHR040W	14	11	20	2273.37
7	YHR041C	2	4	9	2301.69
8	YHR042W	4	12	21	15613
9	YHR043C	3	3	7	3858.19
10	YHR044C	3	3	8	6.351
11	YHR045W	9	6	20	4516.2
12	YHR046C	7	4	7	6178.8
13	YHR047C	4	13	35	11763.3
14	YHR048W	10	10	23	#N/A
15	YHR049C-A	2	3	10	#N/A
16	YHR049W	1	8	6	9496.75
17	YHR050W	7	9	20	1037.36
18	YHR050W-	4	3	3	#N/A
19	YHR051W	1	2	14	780.508
20	YHR052W	1	5	9	15773.2
21	YHR052W-	4	4	5	#N/A
22	YHR053C	12	1	0	87.506
23	YHR054C	2	6	10	#N/A
24	YHR054W-	4	4	5	#N/A
25	YHR055C	12	1	0	#N/A
26	YHR056C	12	20	25	3196.92
27	YHR056W-	2	12	16	#N/A
28	YHR057C	3	5	6	1194.82
29	YHR058C	0	2	12	1265.27
30	YHR059W	1	3	9	936.768
31	YHR060W	1	1	7	1759.8
32	YHR061C	2	10	12	#N/A
33	YHR062C	4	7	19	1818.89
34	YHR063C	9	7	17	10786.5
35	YHR063W-	0	2	2	#N/A
36	YHR064C	2	9	16	24295.3
37	YHR065C	5	6	32	10815.8
38	YHR066W	2	12	30	4199.41
39	YHR067W	7	7	20	514.247
40	YHR068W	7	8	13	18794.7
41	YHR069C	3	7	20	4786.52
42	YHR069C-A	3	2	3	#N/A
43	YHR070C-A	6	7	9	#N/A
44	YHR070W	8	18	19	6067.29
45	YHR071C-A	4	2	10	#N/A
46	YHR071W	6	9	13	#N/A
47	YHR072W	15	20	31	3657.56
48	YHR072W-	0	2	5	14612.3
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2	YHR073C-B	1	1	2	#N/A
3	YHR073W	6	29	55	5869.14
4	YHR073W-	1	2	6	#N/A
5	YHR074W	19	16	42	8105.92
6	YHR075C	4	10	15	946.69
7	YHR076W	3	4	14	5361.73
8	YHR077C	5	15	53	12300.8
9	YHR078W	7	7	15	807.518
10	YHR079C	14	25	60	2199.93
11	YHR079C-A	1	0	2	#N/A
12	YHR080C	4	33	62	1507.78
13	YHR081W	0	2	8	2729.51
14	YHR082C	6	38	44	4738.06
15	YHR083W	8	8	12	2901.56
16	YHR084W	7	9	27	6154.18
17	YHR085W	5	10	16	2021.93
18	YHR086W	6	6	16	1896.02
19	YHR086W-	4	2	6	#N/A
20	YHR087W	0	0	2	456.868
21	YHR088W	1	8	23	9714.23
22	YHR089C	3	1	25	6241.51
23	YHR090C	9	4	14	1257.93
24	YHR091C	6	15	37	1410.41
25	YHR092C	13	5	18	1041.94
26	YHR093W	5	2	4	#N/A
27	YHR094C	18	6	21	8005.66
28	YHR095W	6	6	8	#N/A
29	YHR096C	15	2	26	271.686
30	YHR097C	1	18	26	2147.21
31	YHR098C	18	21	33	8888.66
32	YHR099W	37	83	167	25109.8
33	YHR100C	3	5	6	1516.93
34	YHR101C	4	2	16	1482.18
35	YHR102W	8	17	38	6191.92
36	YHR103W	9	15	42	7262.35
37	YHR104W	6	11	10	5511.56
38	YHR105W	3	5	13	699.176
39	YHR106W	4	7	16	714.524
40	YHR107C	2	11	29	8889.52
41	YHR108W	3	11	19	12075.2
42	YHR109W	8	13	28	1492.25
43	YHR110W	4	6	10	478.924
44	YHR111W	13	8	25	4060.36
45	YHR112C	3	12	17	1616.61
46	YHR113W	4	18	21	6493.17
47	YHR114W	4	10	21	7715.08
48	YHR115C	10	12	20	3527.78
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2	YHR116W	4	0	10	639.291
3	YHR117W	4	8	24	11905
4	YHR118C	11	7	27	3696.37
5	YHR119W	13	34	70	4911.15
6	YHR120W	14	18	53	4416.44
7	YHR121W	1	2	7	5961.27
8	YHR122W	3	6	10	1070.49
9	YHR123W	6	10	9	416.912
10	YHR124W	8	13	36	#N/A
11	YHR125W	5	2	5	#N/A
12	YHR126C	1	2	2	#N/A
13	YHR127W	0	6	19	4557.22
14	YHR128W	5	2	15	15112.7
15	YHR129C	7	2	17	1093.14
16	YHR130C	1	5	2	#N/A
17	YHR131C	13	23	72	518.58
18	YHR131W-,	3	3	4	#N/A
19	YHR132C	7	14	20	5141.57
20	YHR132W-,	0	2	9	1404.25
21	YHR133C	4	4	7	4976.12
22	YHR134W	3	10	19	40.45
23	YHR135C	4	17	26	8920
24	YHR136C	2	5	9	38.094
25	YHR137C-A	4	1	9	#N/A
26	YHR137W	2	6	22	3187.17
27	YHR138C	1	3	2	569.675
28	YHR139C	2	3	5	74.906
29	YHR139C-A	5	2	9	#N/A
30	YHR140W	2	6	5	235.562
31	YHR141C	5	4	8	12798.3
32	YHR142W	9	4	6	466.379
33	YHR143W	1	0	5	#N/A
34	YHR143W-,	4	1	8	2004.42
35	YHR144C	14	9	23	1658.34
36	YHR145C	3	4	8	#N/A
37	YHR146W	2	3	14	14829.3
38	YHR147C	1	6	11	2528.25
39	YHR148W	2	8	17	8660.73
40	YHR149C	4	19	29	5467.97
41	YHR150W	8	12	30	639.162
42	YHR151C	10	5	24	650.517
43	YHR152W	1	5	9	87.236
44	YHR153C	1	3	10	#N/A
45	YHR154W	16	29	29	9325.2
46	YHR155W	19	24	56	1964.69
47	YHR156C	1	12	13	1512.73
48	YHR157W	4	1	8	#N/A
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2	YHR158C	5	33	42	14959.6
3	YHR159W	2	14	35	2193.94
4	YHR160C	3	7	11	45.783
5	YHR161C	1	18	20	1228.87
6	YHR162W	2	1	10	467.168
7	YHR163W	4	5	8	9363.47
8	YHR164C	25	21	73	3487.71
9	YHR165C	10	58	129	14434.7
10	YHR165W-	1	0	2	#N/A
11	YHR166C	14	9	28	570.433
12	YHR167W	2	5	14	2491.42
13	YHR168W	6	14	27	2060.27
14	YHR169W	4	9	29	7550.52
15	YHR170W	13	14	27	5433.58
16	YHR171W	14	13	28	2939.27
17	YHR172W	9	14	47	4312.64
18	YHR173C	4	5	3	#N/A
19	YHR174W	1	10	14	123441
20	YHR175W	7	7	4	#N/A
21	YHR175W-	1	1	1	#N/A
22	YHR176W	3	12	15	653.517
23	YHR177W	5	18	27	110.673
24	YHR178W	19	14	44	574.748
25	YHR179W	0	8	22	32177.5
26	YHR180C-B	2	0	4	#N/A
27	YHR180W	0	5	5	#N/A
28	YHR180W-	4	3	1	#N/A
29	YHR181W	4	3	12	4139.4
30	YHR182C-A	0	4	8	#N/A
31	YHR182W	14	14	34	3360.22
32	YHR183W	7	9	21	27623.3
33	YHR184W	4	9	23	195.071
34	YHR185C	6	4	8	#N/A
35	YHR186C	19	34	71	8258.52
36	YHR187W	3	7	8	1137.36
37	YHR188C	8	13	25	4215.4
38	YHR189W	4	6	17	215.674
39	YHR190W	8	14	18	11157.7
40	YHR191C	0	1	8	1406.65
41	YHR192W	6	8	9	2792.11
42	YHR193C	0	1	4	21211.4
43	YHR193C-A	2	2	10	#N/A
44	YHR194W	3	6	37	285.999
45	YHR195W	4	7	19	1727.98
46	YHR196W	6	10	11	13580.4
47	YHR197W	9	18	24	14272.8
48	YHR198C	4	8	16	1334.23
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2	YHR199C	4	5	12	2883.33
3	YHR199C-A	0	1	6	188.866
4	YHR200W	1	6	14	3741.14
5	YHR201C	5	7	19	8342.4
6	YHR202W	7	23	28	1627.63
7	YHR203C	1	10	22	50610.4
8	YHR204W	11	20	32	863.224
9	YHR205W	9	31	24	7046.1
10	YHR206W	5	19	23	5096.22
11	YHR207C	15	18	29	5763.46
12	YHR208W	4	6	17	18454.9
13	YHR209W	5	4	15	734.506
14	YHR210C	4	6	14	#N/A
15	YHR211W	17	6	14	#N/A
16	YHR212C	3	0	15	#N/A
17	YHR212W-	1	1	1	#N/A
18	YHR213W	3	1	1	#N/A
19	YHR213W-	1	2	4	#N/A
20	YHR213W-I	7	4	7	#N/A
21	YHR214C-B	15	64	72	#N/A
22	YHR214C-C	3	13	14	#N/A
23	YHR214C-D	3	4	1	#N/A
24	YHR214C-E	5	2	5	#N/A
25	YHR214W	0	1	2	#N/A
26	YHR214W-	0	8	3	#N/A
27	YHR215W	9	9	15	#N/A
28	YHR216W	8	7	23	23528.3
29	YHR217C	3	24	2	#N/A
30	YHR218W	13	13	42	#N/A
31	YHR218W-	4	0	8	#N/A
32	YHR219C-A	4	6	9	#N/A
33	YHR219W	12	11	39	#N/A
34	YIL001W	10	9	29	1375.13
35	YIL002C	10	18	44	3552.44
36	YIL002W-A	0	1	2	#N/A
37	YIL003W	6	4	7	3140.75
38	YIL004C	0	1	8	1020.09
39	YIL005W	9	16	31	8540.48
40	YIL006W	5	10	18	258.409
41	YIL007C	1	5	11	1376.15
42	YIL008W	0	3	2	143.333
43	YIL009C-A	6	9	4	#N/A
44	YIL009W	10	16	28	7202.02
45	YIL010W	2	3	12	5661.32
46	YIL011W	0	1	1	#N/A
47	YIL012W	4	4	7	#N/A
48	YIL013C	33	35	50	969.539

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2	YIL014C-A	1	1	0	#N/A
3	YIL014W	9	10	32	3133.9
4	YIL015W	9	10	9	#N/A
5	YIL016W	1	2	10	1812.86
6	YIL017C	20	16	31	2011.44
7	YIL018W	0	10	26	#N/A
8	YIL019W	0	5	27	1963.42
9	YIL020C	8	6	10	8187.85
10	YIL020C-A	3	9	7	#N/A
11	YIL021C-A	5	2	5	#N/A
12	YIL021W	7	5	8	4206.74
13	YIL022W	1	4	32	10266
14	YIL023C	4	20	7	76.119
15	YIL024C	4	5	7	64.429
16	YIL025C	2	3	9	#N/A
17	YIL026C	11	24	42	7080.89
18	YIL027C	1	4	2	1376.7
19	YIL028W	3	1	9	#N/A
20	YIL029C	4	1	6	#N/A
21	YIL029W-A	2	3	4	#N/A
22	YIL030C	18	29	61	8479.7
23	YIL030W-A	0	7	5	#N/A
24	YIL031W	9	25	40	1192.95
25	YIL032C	1	4	11	#N/A
26	YIL033C	2	8	22	10198.6
27	YIL034C	2	7	13	5271
28	YIL035C	2	13	20	2968.55
29	YIL036W	2	15	24	5147.86
30	YIL037C	5	11	16	#N/A
31	YIL038C	4	13	39	14093.5
32	YIL039W	6	18	15	6469.73
33	YIL040W	2	2	4	334.35
34	YIL041W	3	4	12	10919.5
35	YIL042C	6	14	15	391.99
36	YIL043C	2	8	10	17058.1
37	YIL044C	5	8	9	4829.4
38	YIL045W	2	22	28	1287.57
39	YIL046W	23	21	37	1418.89
40	YIL046W-A	10	0	2	#N/A
41	YIL047C	16	20	54	4962.46
42	YIL047C-A	4	4	5	#N/A
43	YIL048W	17	29	49	7742.68
44	YIL049W	5	8	9	622.132
45	YIL050W	5	6	7	590.544
46	YIL051C	1	3	5	9935.07
47	YIL052C	4	2	13	#N/A
48	YIL053W	3	6	6	29401.7
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2	YIL054W	4	5	3	#N/A
3	YIL055C	2	16	27	774.725
4	YIL056W	6	13	27	1235.02
5	YIL057C	2	12	2	1128.77
6	YIL058W	8	4	4	#N/A
7	YIL059C	2	2	5	#N/A
8	YIL060W	5	2	8	#N/A
9	YIL061C	1	4	31	2390.17
10	YIL062C	0	1	10	3561.38
11	YIL063C	1	2	8	9954.88
12	YIL064W	3	2	6	2069.1
13	YIL065C	2	1	11	1125.22
14	YIL066C	13	19	39	1281.49
15	YIL066W-A	8	4	4	#N/A
16	YIL067C	15	10	28	999.491
17	YIL068C	9	12	32	7332.34
18	YIL068W-A	6	1	8	#N/A
19	YIL069C	0	1	14	#N/A
20	YIL070C	1	3	11	621.656
21	YIL071C	10	9	14	165.518
22	YIL071W-A	4	1	4	#N/A
23	YIL072W	11	6	24	892.746
24	YIL073C	20	13	28	#N/A
25	YIL074C	4	12	16	4476.67
26	YIL075C	8	12	33	28646.2
27	YIL076W	2	5	2	3793.23
28	YIL077C	0	3	24	798.905
29	YIL078W	12	19	39	53555.4
30	YIL079C	16	12	27	1666.61
31	YIL082W	6	8	25	#N/A
32	YIL082W-A	17	43	96	#N/A
33	YIL083C	2	10	16	2064.68
34	YIL084C	1	6	29	966.151
35	YIL085C	14	14	25	2158.18
36	YIL086C	1	2	6	#N/A
37	YIL087C	0	0	8	881.476
38	YIL088C	8	5	11	1291.19
39	YIL089W	5	9	9	#N/A
40	YIL090W	14	6	17	912.36
41	YIL091C	3	18	47	11603.4
42	YIL092W	12	11	32	#N/A
43	YIL093C	0	7	15	3407.38
44	YIL094C	5	4	20	9369.18
45	YIL095W	6	20	50	3616.82
46	YIL096C	1	9	17	1535.12
47	YIL097W	7	18	17	960.404
48	YIL098C	0	2	14	610.24
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2	YIL099W	2	14	17	494.085
3	YIL100C-A	7	7	3	#N/A
4	YIL100W	2	6	9	#N/A
5	YIL101C	8	20	30	87.97
6	YIL102C	3	3	1	#N/A
7	YIL102C-A	1	0	2	#N/A
8	YIL102C-A	1	0	2	#N/A
9	YIL103W	7	11	21	3734.21
10	YIL104C	3	8	20	6555.7
11	YIL105C	2	12	26	3399.74
12	YIL105C	2	12	26	3399.74
13	YIL105W-A	2	5	1	#N/A
14	YIL106W	7	11	16	2395.61
15	YIL107C	4	17	49	3873.39
16	YIL108W	14	19	32	6153.12
17	YIL109C	14	18	46	18614.8
18	YIL109C	14	18	46	18614.8
19	YIL110W	4	5	14	4514.63
20	YIL111W	0	1	9	1798.89
21	YIL112W	2	21	61	6297.62
22	YIL113W	3	7	13	#N/A
23	YIL113W	3	7	13	#N/A
24	YIL114C	2	3	15	2922.61
25	YIL115C	6	19	28	19686.1
26	YIL115W-A	3	2	3	#N/A
27	YIL116W	9	5	14	4560.27
28	YIL117C	0	6	12	1820.14
29	YIL117C	0	6	12	1820.14
30	YIL118W	8	3	8	4068.01
31	YIL119C	4	8	9	2965.53
32	YIL120W	12	10	26	30.103
33	YIL121W	15	5	26	3442.06
34	YIL122W	2	11	20	460.43
35	YIL123W	10	6	4	5263.21
36	YIL123W	10	6	4	5263.21
37	YIL124W	4	3	12	5085.18
38	YIL125W	7	34	49	9353.23
39	YIL126W	6	24	87	19230
40	YIL127C	1	7	14	1698.48
41	YIL127C	1	7	14	1698.48
42	YIL128W	13	15	25	6194.59
43	YIL129C	30	46	98	10021.2
44	YIL130W	13	15	41	8071.7
45	YIL131C	4	8	26	4120.58
46	YIL132C	2	2	13	85.114
47	YIL132C	2	2	13	85.114
48	YIL133C	0	4	16	23492.9
49	YIL134C-A	2	0	3	#N/A
50	YIL134W	2	6	14	54.628
51	YIL135C	1	15	28	749.887
52	YIL136W	0	2	25	1494.44
53	YIL136W	0	2	25	1494.44
54	YIL137C	12	30	26	15700.4
55	YIL138C	1	0	5	1858.77
56	YIL139C	4	6	10	#N/A
57	YIL139C	4	6	10	#N/A
58	YIL140W	4	14	26	7396.59
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2	YIL141W	1	4	6	#N/A
3	YIL142C-A	3	1	3	#N/A
4	YIL142W	6	8	23	26229.7
5	YIL143C	10	20	49	4098.07
6	YIL144W	2	16	33	5396.79
7	YIL145C	4	5	17	5552.42
8	YIL146C	6	10	14	214.071
9	YIL147C	7	20	57	4154.9
10	YIL148W	5	2	10	37412.1
11	YIL149C	16	18	80	21834.8
12	YIL150C	5	14	36	3134.95
13	YIL151C	16	24	45	2618.45
14	YIL152W	1	12	10	5.562
15	YIL153W	4	19	21	631.06
16	YIL154C	5	10	23	1103.3
17	YIL155C	8	13	30	6227.03
18	YIL156W	9	34	50	2757.72
19	YIL156W-A	3	1	10	#N/A
20	YIL156W-B	2	1	4	486.309
21	YIL157C	0	3	14	927.935
22	YIL158W	2	2	11	24.105
23	YIL159W	15	26	50	2185.07
24	YIL160C	8	4	19	1162.86
25	YIL161W	1	3	13	1425.54
26	YIL162W	2	4	13	2829.8
27	YIL163C	2	6	10	#N/A
28	YIL164C	7	2	7	#N/A
29	YIL165C	1	2	5	#N/A
30	YIL166C	6	6	25	#N/A
31	YIL169C	20	10	5	1035.68
32	YIL170W	9	5	16	#N/A
33	YIL171W	1	1	4	#N/A
34	YIL171W-A	8	3	8	#N/A
35	YIL172C	5	14	30	415.42
36	YIL173W	35	30	70	2166.86
37	YIL174W	6	0	5	#N/A
38	YIL175W	4	7	5	#N/A
39	YIL176C	0	2	4	#N/A
40	YIL177C	31	30	111	#N/A
41	YIL177W-A	4	6	9	#N/A
42	YIR001C	1	5	10	2479.27
43	YIR002C	17	17	50	3035.29
44	YIR003W	2	14	28	7742.83
45	YIR004W	2	6	13	8410.47
46	YIR005W	0	3	7	1031.14
47	YIR006C	4	11	40	17322.1
48	YIR007W	19	19	26	2073.87
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2	YIR008C	8	9	25	5688.8
3	YIR009W	0	2	8	381.448
4	YIR010W	1	16	23	2769.23
5	YIR011C	5	9	16	#N/A
6	YIR012W	11	12	5	3765.45
7	YIR013C	5	1	12	#N/A
8	YIR014W	7	4	11	541.718
9	YIR015W	4	5	11	147.906
10	YIR016W	5	9	20	26.771
11	YIR017C	0	1	15	152.617
12	YIR017W-A	11	2	13	#N/A
13	YIR018C-A	0	2	2	#N/A
14	YIR018W	8	11	15	256.396
15	YIR019C	20	5	2	#N/A
16	YIR020C	1	3	8	#N/A
17	YIR020C-B	5	5	15	#N/A
18	YIR020W-A	0	2	5	#N/A
19	YIR021W	9	3	18	2013.39
20	YIR021W-A	1	0	2	#N/A
21	YIR022W	1	3	5	1729.12
22	YIR023C-A	4	0	1	#N/A
23	YIR023W	14	26	37	2409.56
24	YIR024C	0	3	11	1125.66
25	YIR025W	0	9	33	#N/A
26	YIR026C	9	10	16	7589.33
27	YIR027C	11	15	15	#N/A
28	YIR028W	14	8	23	#N/A
29	YIR029W	3	13	20	442.558
30	YIR030C	5	2	6	1046.07
31	YIR030W-A	4	2	2	#N/A
32	YIR031C	6	15	27	669.271
33	YIR032C	5	6	6	280.331
34	YIR033W	14	25	42	2676.79
35	YIR034C	4	11	22	3701.88
36	YIR035C	1	3	6	2140.59
37	YIR036C	4	3	13	3906.74
38	YIR036W-A	4	4	9	#N/A
39	YIR037W	3	1	3	3479.06
40	YIR038C	0	7	9	1830.19
41	YIR039C	6	1	4	37.337
42	YIR040C	8	2	8	#N/A
43	YIR041W	0	2	5	#N/A
44	YIR042C	3	1	18	#N/A
45	YJL001W	4	4	8	6696.3
46	YJL002C	2	11	13	4923
47	YJL003W	1	1	10	34.987
48	YJL004C	2	3	8	986.089
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2	YJL005W	20	55	102	12591.8
3	YJL006C	8	6	20	3001.64
4	YJL007C	1	7	4	#N/A
5	YJL008C	6	10	22	26850.5
6	YJL009W	8	4	4	#N/A
7	YJL010C	5	15	38	13729.3
8	YJL011C	1	3	6	4933.21
9	YJL012C	4	15	42	16271.6
10	YJL013C	4	5	35	1287.02
11	YJL014W	11	8	26	29050.2
12	YJL015C	6	5	9	#N/A
13	YJL016W	10	15	23	1452.79
14	YJL019W	2	16	27	3423.1
15	YJL020C	0	37	45	13529.4
16	YJL020W-A	3	0	2	#N/A
17	YJL022W	3	1	6	#N/A
18	YJL023C	3	4	18	145.805
19	YJL024C	2	1	5	1545.27
20	YJL025W	10	14	30	86.366
21	YJL026C-A	1	1	0	#N/A
22	YJL026W	2	10	15	11089.4
23	YJL027C	10	6	14	#N/A
24	YJL028W	4	5	11	#N/A
25	YJL029C	7	9	32	5668.57
26	YJL030W	2	4	7	3821.85
27	YJL031C	2	8	18	2556.67
28	YJL032W	6	4	9	#N/A
29	YJL033W	5	16	37	16928.9
30	YJL034W	1	8	20	36426.2
31	YJL035C	7	8	12	93.396
32	YJL036W	3	11	19	4807.91
33	YJL037W	4	1	8	#N/A
34	YJL038C	2	1	12	#N/A
35	YJL039C	19	24	60	11154.1
36	YJL041W	0	3	3	21148.2
37	YJL042W	15	44	67	9959.84
38	YJL043W	9	7	14	#N/A
39	YJL044C	7	16	18	2636.45
40	YJL045W	10	25	37	1099.25
41	YJL046W	5	7	15	1545.69
42	YJL047C	13	23	39	3914.09
43	YJL047C-A	1	1	3	#N/A
44	YJL048C	4	7	19	366.719
45	YJL049W	0	9	28	4006.07
46	YJL050W	12	24	58	30756.5
47	YJL051W	7	26	31	295.145
48	YJL052C-A	2	1	5	#N/A
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2	YJL052W	2	8	11	2096.61
3	YJL053W	4	7	20	5361.19
4	YJL054W	4	5	23	9093.41
5	YJL055W	4	8	7	3321.08
6	YJL056C	41	62	23	1151.66
7	YJL057C	12	16	33	584.57
8	YJL058C	6	17	28	416.752
9	YJL059W	7	8	14	918.26
10	YJL060W	6	6	16	6851.33
11	YJL061W	9	10	25	7356.4
12	YJL062W	11	22	18	2950.12
13	YJL062W-A	0	2	3	840.919
14	YJL063C	2	7	16	2659.31
15	YJL064W	13	1	5	#N/A
16	YJL065C	1	4	5	241.312
17	YJL066C	2	5	8	1093.48
18	YJL067W	3	4	6	#N/A
19	YJL068C	5	13	8	3155.57
20	YJL069C	6	17	20	4263.61
21	YJL070C	8	14	35	2935.53
22	YJL071W	5	20	26	2679.81
23	YJL072C	1	7	14	837.389
24	YJL073W	7	18	23	3434.54
25	YJL074C	3	16	64	16011.3
26	YJL075C	2	1	3	#N/A
27	YJL076W	2	10	44	27114.1
28	YJL077C	2	4	9	#N/A
29	YJL077W-A	2	1	0	#N/A
30	YJL077W-B	1	0	3	#N/A
31	YJL078C	11	9	9	#N/A
32	YJL079C	4	6	2	59.174
33	YJL080C	4	19	44	75467
34	YJL081C	7	6	20	6990.07
35	YJL082W	8	11	40	5907.09
36	YJL083W	2	28	44	355.653
37	YJL084C	4	35	48	5133.07
38	YJL085W	5	9	25	4911.57
39	YJL086C	2	5	8	#N/A
40	YJL087C	21	17	35	11123.4
41	YJL088W	7	9	11	1617.64
42	YJL089W	15	14	20	130.407
43	YJL090C	11	18	27	1423.33
44	YJL091C	9	3	16	256.315
45	YJL092W	8	25	69	4694.83
46	YJL093C	13	12	23	617.57
47	YJL094C	8	17	30	2219.36
48	YJL095W	6	30	59	3237.85
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2	YJL096W	0	4	14	1659.64
3	YJL097W	2	1	8	285.728
4	YJL098W	10	19	40	6610.22
5	YJL099W	18	14	30	2008.14
6	YJL100W	9	20	29	920.062
7	YJL101C	9	19	34	11225.5
8	YJL102W	11	10	32	1348.73
9	YJL103C	18	22	26	569.787
10	YJL104W	1	1	8	3529.14
11	YJL105W	16	15	31	#N/A
12	YJL106W	7	24	27	#N/A
13	YJL107C	3	8	21	#N/A
14	YJL108C	10	7	9	#N/A
15	YJL109C	16	23	69	30049.9
16	YJL110C	10	16	29	4135.99
17	YJL111W	9	7	20	23080.9
18	YJL112W	8	12	35	3378.27
19	YJL113W	23	46	67	#N/A
20	YJL114W	2	2	13	#N/A
21	YJL115W	2	3	10	3808.47
22	YJL116C	10	4	3	207.135
23	YJL117W	1	6	14	3662.62
24	YJL118W	8	9	27	#N/A
25	YJL119C	3	3	8	#N/A
26	YJL120W	4	4	6	#N/A
27	YJL121C	5	9	6	8292.07
28	YJL122W	0	3	9	4741.15
29	YJL123C	0	6	8	10152.1
30	YJL124C	1	3	12	3371.53
31	YJL125C	6	14	25	5311.59
32	YJL126W	4	10	17	1491.68
33	YJL127C	5	23	29	1540.99
34	YJL127C-B	1	1	3	6.067
35	YJL127W-A	0	0	2	#N/A
36	YJL128C	6	18	30	8244.59
37	YJL129C	9	39	79	1737.94
38	YJL130C	23	44	103	82549
39	YJL131C	1	6	22	1968.42
40	YJL132W	7	19	24	549.401
41	YJL133C-A	0	2	6	931.727
42	YJL133W	7	9	7	964.425
43	YJL134W	13	10	23	148.395
44	YJL135W	3	4	5	#N/A
45	YJL136C	1	1	7	14084.9
46	YJL136W-A	1	1	1	#N/A
47	YJL137C	5	12	15	1570.39
48	YJL138C	3	4	24	40799.2
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2	YJL139C	7	9	28	1306.36
3	YJL140W	1	6	13	5837.03
4	YJL141C	13	19	34	3645.9
5	YJL142C	3	3	5	#N/A
6	YJL143W	4	3	10	2170.07
7	YJL144W	1	4	9	#N/A
8	YJL145W	5	3	7	9747.92
9	YJL146W	6	7	20	993.224
10	YJL147C	3	12	23	1093.08
11	YJL148W	1	7	6	5853.24
12	YJL149W	10	18	27	1808.99
13	YJL150W	1	4	6	#N/A
14	YJL151C	1	6	9	312.69
15	YJL152W	3	10	10	#N/A
16	YJL153C	6	9	17	2043.6
17	YJL154C	18	25	41	5307.79
18	YJL155C	5	6	25	3157.1
19	YJL156C	7	16	26	3398.01
20	YJL156W-A	3	0	1	#N/A
21	YJL157C	15	19	32	4387.36
22	YJL158C	6	1	3	4237.14
23	YJL159W	4	2	3	3138.89
24	YJL160C	4	6	4	#N/A
25	YJL161W	1	5	5	178.788
26	YJL162C	6	20	25	1437.82
27	YJL163C	10	13	22	137.037
28	YJL164C	2	8	20	2503.34
29	YJL165C	15	31	43	4968.17
30	YJL166W	0	2	4	408.443
31	YJL167W	6	5	11	15694.2
32	YJL168C	17	14	32	7317.76
33	YJL169W	4	1	4	#N/A
34	YJL170C	6	6	8	#N/A
35	YJL171C	9	6	7	4195.83
36	YJL172W	4	26	18	7198.18
37	YJL173C	3	0	5	824.582
38	YJL174W	3	1	9	3187.04
39	YJL175W	8	0	4	#N/A
40	YJL176C	2	14	26	10409
41	YJL177W	0	4	19	27890.8
42	YJL178C	8	3	7	5629.7
43	YJL179W	1	1	5	2750.71
44	YJL180C	4	4	17	3206.14
45	YJL181W	11	19	28	#N/A
46	YJL182C	0	3	6	46.797
47	YJL183W	3	14	16	7868.81
48	YJL184W	0	1	8	409.027
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2	YJL185C	4	7	24	60.018
3	YJL186W	7	17	21	11536.2
4	YJL187C	4	23	35	979.094
5	YJL188C	2	6	5	#N/A
6	YJL189W	0	0	9	4720.96
7	YJL190C	1	4	9	19636.6
8	YJL191W	1	2	15	#N/A
9	YJL192C	0	2	13	6351.89
10	YJL193W	7	5	15	620.902
11	YJL194W	6	7	26	984.488
12	YJL195C	11	0	6	#N/A
13	YJL196C	7	7	13	974.223
14	YJL197C-A	3	0	1	#N/A
15	YJL197W	19	19	44	10416.3
16	YJL198W	10	12	20	5714.01
17	YJL199C	1	2	10	40.039
18	YJL200C	9	16	27	12662.2
19	YJL201W	3	7	26	4405.2
20	YJL202C	5	1	5	#N/A
21	YJL203W	2	5	18	3743.82
22	YJL204C	10	7	26	8196.16
23	YJL205C	1	3	4	#N/A
24	YJL206C	17	16	36	441.274
25	YJL207C	24	36	55	13667.3
26	YJL208C	6	7	17	4723.26
27	YJL209W	12	19	38	1815.42
28	YJL210W	13	6	16	479.312
29	YJL211C	8	7	11	#N/A
30	YJL212C	12	12	26	2197.2
31	YJL213W	9	6	15	#N/A
32	YJL214W	18	4	20	#N/A
33	YJL215C	2	3	13	#N/A
34	YJL216C	7	14	23	103.105
35	YJL217W	1	5	9	2190.25
36	YJL218W	3	3	7	462.882
37	YJL219W	11	4	20	#N/A
38	YJL220W	8	3	8	#N/A
39	YJL221C	5	14	30	#N/A
40	YJL222W	35	30	70	#N/A
41	YJL222W-A	6	0	5	#N/A
42	YJL222W-B	3	1	3	#N/A
43	YJL223C	0	2	4	#N/A
44	YJL225C	30	30	112	#N/A
45	YJL225W-A	4	6	9	#N/A
46	YJR001W	14	8	28	4095.84
47	YJR002W	1	6	27	13350.5
48	YJR003C	6	12	15	5364.48
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2	YJR004C	7	8	8	3432.15
3	YJR005C-A	0	1	11	#N/A
4	YJR005W	6	13	33	6897.89
5	YJR006W	11	5	19	3530.35
6	YJR007W	5	3	14	18845.8
7	YJR008W	6	13	14	654.509
8	YJR009C	2	8	11	3423.41
9	YJR010C-A	3	0	3	443.96
10	YJR010W	1	14	32	2187.79
11	YJR011C	5	5	8	2070.43
12	YJR012C	5	5	7	21.265
13	YJR013W	6	8	15	1056.97
14	YJR014W	5	2	9	4171.31
15	YJR015W	6	6	17	2232.71
16	YJR016C	10	12	21	42964.9
17	YJR017C	2	8	14	4838.84
18	YJR018W	9	3	8	#N/A
19	YJR019C	1	20	15	1287.92
20	YJR020W	6	0	5	#N/A
21	YJR021C	2	11	21	#N/A
22	YJR022W	2	1	3	1347.06
23	YJR023C	2	2	8	#N/A
24	YJR024C	9	9	4	4832.42
25	YJR025C	5	6	7	4197.87
26	YJR026W	4	14	14	#N/A
27	YJR027W	14	61	71	#N/A
28	YJR028W	4	15	14	#N/A
29	YJR029W	15	62	70	#N/A
30	YJR030C	11	14	35	#N/A
31	YJR031C	16	19	49	9140.01
32	YJR032W	7	5	16	6516.65
33	YJR033C	25	34	55	9404.01
34	YJR034W	7	1	5	4401.03
35	YJR035W	9	23	59	1553.9
36	YJR036C	24	19	53	190.393
37	YJR037W	1	1	8	#N/A
38	YJR038C	2	3	7	#N/A
39	YJR039W	27	21	44	153.339
40	YJR040W	14	13	31	3585.28
41	YJR041C	22	31	34	10145.5
42	YJR042W	12	5	27	6266.62
43	YJR043C	5	4	15	4195.83
44	YJR044C	4	5	0	511.47
45	YJR045C	0	3	30	27600.3
46	YJR046W	7	9	35	1581.36
47	YJR047C	2	5	4	1636.56
48	YJR048W	3	4	3	1711.73
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2	YJR049C	9	14	29	3221.16
3	YJR050W	1	7	17	4248.62
4	YJR051W	3	12	20	5288.3
5	YJR052W	11	7	33	1536.68
6	YJR053W	3	11	36	1361
7	YJR054W	7	5	21	454.355
8	YJR055W	7	4	5	1658.92
9	YJR056C	3	8	19	545.61
10	YJR057W	3	3	8	2779.3
11	YJR058C	3	5	9	518.57
12	YJR059W	8	30	37	5806.2
13	YJR060W	1	9	19	6497.02
14	YJR061W	5	25	46	352.449
15	YJR062C	7	6	12	4537.85
16	YJR063W	8	1	3	2446.38
17	YJR064W	9	9	22	22158.8
18	YJR065C	5	6	21	4795.97
19	YJR066W	31	61	112	10716.1
20	YJR067C	1	3	6	2597.34
21	YJR068W	5	6	18	6646.72
22	YJR069C	1	4	5	8331.87
23	YJR070C	3	8	14	28569.8
24	YJR071W	2	3	4	#N/A
25	YJR072C	6	1	14	11901.4
26	YJR073C	4	3	7	563.702
27	YJR074W	2	5	6	3363.34
28	YJR075W	1	13	20	3855.82
29	YJR076C	3	8	31	3650.46
30	YJR077C	3	2	7	3863.05
31	YJR078W	10	14	26	750.816
32	YJR079W	2	3	1	#N/A
33	YJR080C	3	7	23	3230.84
34	YJR082C	0	9	3	1228.76
35	YJR083C	0	8	16	2138.88
36	YJR084W	9	12	32	1739.78
37	YJR085C	0	2	4	#N/A
38	YJR086W	3	1	5	1009.01
39	YJR087W	2	3	5	#N/A
40	YJR088C	4	0	9	3162.69
41	YJR089W	12	19	49	1944.63
42	YJR090C	21	25	72	3989.83
43	YJR091C	8	32	35	4543.07
44	YJR092W	12	35	54	11514
45	YJR093C	0	2	11	2063.84
46	YJR094C	3	12	8	#N/A
47	YJR094W-A	5	1	10	20242.6
48	YJR095W	3	7	14	1097.27
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2	YJR096W	6	8	11	3560.62
3	YJR097W	6	6	9	2612.3
4	YJR098C	6	15	33	1026.61
5	YJR099W	1	3	7	1037.89
6	YJR100C	2	8	24	1331.06
7	YJR101W	2	7	7	1060.58
8	YJR102C	4	1	10	310.465
9	YJR103W	8	19	28	5320.76
10	YJR104C	2	6	4	15944.3
11	YJR105W	3	7	5	27574.1
12	YJR106W	14	15	25	6.96
13	YJR107W	8	9	15	#N/A
14	YJR108W	2	3	4	#N/A
15	YJR109C	11	16	41	22463.5
16	YJR110W	10	22	36	1722.69
17	YJR111C	3	9	13	2260.71
18	YJR112W	4	5	10	1573.32
19	YJR112W-A	3	1	6	#N/A
20	YJR113C	3	5	18	3194.96
21	YJR114W	6	4	8	#N/A
22	YJR115W	2	12	9	#N/A
23	YJR116W	4	7	9	#N/A
24	YJR117W	3	13	11	8877.47
25	YJR118C	2	2	5	839.797
26	YJR119C	20	17	32	1391.78
27	YJR120W	3	2	12	#N/A
28	YJR121W	1	7	25	10560.9
29	YJR122W	2	9	25	2343.43
30	YJR123W	1	2	17	11714.6
31	YJR124C	11	8	15	589.61
32	YJR125C	0	5	17	9229.61
33	YJR126C	3	24	44	208.028
34	YJR127C	27	38	64	2666.63
35	YJR128W	7	4	10	#N/A
36	YJR129C	10	5	14	2675.66
37	YJR130C	14	11	28	1848.45
38	YJR131W	5	18	24	4102.57
39	YJR132W	20	10	31	10044.5
40	YJR133W	2	7	10	3932.77
41	YJR134C	2	11	28	7980.67
42	YJR135C	0	4	12	709.428
43	YJR135W-A	4	1	3	581.178
44	YJR136C	10	7	20	1073.81
45	YJR137C	7	28	52	9071.99
46	YJR138W	16	39	82	8054.27
47	YJR139C	0	3	8	20317.1
48	YJR140C	19	38	70	5312.02
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2	YJR140W-A	2	0	1	#N/A
3	YJR141W	10	4	11	285.714
4	YJR142W	3	6	15	3561.32
5	YJR143C	11	27	25	10659
6	YJR144W	7	5	13	4284.06
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8	YJR145C	1	10	22	#N/A
9	YJR146W	4	4	4	#N/A
10	YJR147W	5	14	15	1361.62
11	YJR148W	6	4	14	1252.9
12	YJR149W	5	6	16	829.891
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14	YJR150C	2	2	5	#N/A
15	YJR151C	19	5	19	#N/A
16	YJR151W-A	0	0	2	#N/A
17	YJR152W	8	6	18	#N/A
18	YJR153W	9	5	5	#N/A
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20	YJR154W	9	15	12	29.154
21	YJR155W	1	9	13	#N/A
22	YJR156C	10	5	11	#N/A
23	YJR157W	3	3	4	#N/A
24	YJR158W	14	6	17	#N/A
25	YJR159W	6	8	11	#N/A
26	YJR160C	18	4	22	#N/A
27	YJR161C	10	5	14	#N/A
28	YJR162C	3	10	2	#N/A
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30	YKL001C	4	4	15	1866.68
31	YKL002W	0	1	15	2068.1
32	YKL003C	0	3	10	624.99
33	YKL004W	7	9	8	374.254
34	YKL005C	10	14	25	4909.17
35	YKL006C-A	0	0	7	600.815
36	YKL006W	1	0	11	756.117
37	YKL007W	2	6	10	5565.33
38	YKL008C	4	10	23	1397.17
39	YKL009W	2	2	15	10755.5
40	YKL010C	23	34	71	9168.86
41	YKL011C	8	4	15	1126.96
42	YKL012W	1	12	37	3542.41
43	YKL013C	0	4	12	2363.53
44	YKL014C	15	25	64	19835.9
45	YKL015W	18	20	33	1353.47
46	YKL016C	0	2	7	4597.68
47	YKL017C	6	13	33	4673.82
48	YKL018C-A	1	1	12	477.637
49	YKL018W	8	7	7	2639.07
50	YKL019W	4	9	14	2713.22
51	YKL020C	16	22	48	2075.66
52	YKL021C	8	17	22	10013.8
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2	YKL022C	16	17	31	2240.47
3	YKL023C-A	0	2	4	528.063
4	YKL023W	2	4	22	1674.94
5	YKL024C	4	2	13	7722.26
6	YKL025C	9	12	17	4129.31
7	YKL026C	6	3	5	134.966
8	YKL027W	5	5	24	4788.34
9	YKL028W	4	7	22	4673.21
10	YKL029C	9	17	45	13460.2
11	YKL030W	15	3	8	#N/A
12	YKL031W	9	3	9	#N/A
13	YKL032C	1	18	16	5780.15
14	YKL033W	22	22	37	3371.73
15	YKL033W- <i>f</i>	4	7	5	4497.62
16	YKL034W	10	21	33	2083.71
17	YKL035W	4	16	26	13671.7
18	YKL036C	6	2	9	#N/A
19	YKL037W	7	2	8	#N/A
20	YKL038W	13	20	46	2648.53
21	YKL039W	9	7	15	2273.79
22	YKL040C	3	6	7	5611.73
23	YKL041W	0	0	19	4285.8
24	YKL042W	2	6	24	2297.97
25	YKL043W	2	10	18	296.814
26	YKL044W	1	4	7	203.79
27	YKL045W	8	14	30	4282.44
28	YKL046C	8	5	11	452.3
29	YKL047W	8	13	15	3555.53
30	YKL048C	14	11	31	1238.88
31	YKL049C	0	3	25	546.426
32	YKL050C	6	14	54	416.414
33	YKL051W	6	11	9	1133.97
34	YKL052C	2	12	9	1287.1
35	YKL053C-A	4	0	1	183.645
36	YKL053W	2	3	14	#N/A
37	YKL054C	0	16	7	7958.28
38	YKL055C	7	3	16	595.043
39	YKL056C	1	2	2	39057.3
40	YKL057C	18	27	35	4898.13
41	YKL058W	3	1	6	2325.25
42	YKL059C	8	6	24	3889.07
43	YKL060C	5	12	10	75806.5
44	YKL061W	1	0	6	1336.6
45	YKL062W	4	21	25	6196.63
46	YKL063C	1	2	6	3734.46
47	YKL064W	6	25	67	2245.1
48	YKL065C	2	1	9	2509.74
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2	YKL065W- <i>f</i>	0	1	5	84.41
3	YKL066W	1	3	4	#N/A
4	YKL067W	1	3	8	4038.01
5	YKL068W	5	7	14	8344.72
6	YKL068W- <i>f</i>	0	1	1	#N/A
7	YKL069W	6	6	0	3856.93
8	YKL070W	2	7	10	#N/A
9	YKL071W	1	4	6	174.281
10	YKL072W	16	13	33	577.196
11	YKL073W	3	14	39	16706.5
12	YKL074C	8	7	38	3106.91
13	YKL075C	9	8	16	3451.88
14	YKL076C	4	2	4	#N/A
15	YKL077W	2	8	20	3478.77
16	YKL078W	13	10	47	4588.09
17	YKL079W	6	15	27	6090.21
18	YKL080W	1	7	12	16699.7
19	YKL081W	2	5	14	45567.4
20	YKL082C	0	2	32	4236.95
21	YKL083W	11	3	6	#N/A
22	YKL084W	11	8	4	1263.69
23	YKL085W	1	8	12	4607.22
24	YKL086W	3	1	11	369.033
25	YKL087C	4	6	13	1409.98
26	YKL088W	2	13	24	3917.76
27	YKL089W	1	4	30	1964.52
28	YKL090W	3	13	16	1341.76
29	YKL091C	3	5	16	2678.55
30	YKL092C	12	15	44	6387.97
31	YKL093W	12	5	18	136.783
32	YKL094W	4	12	11	6514.19
33	YKL095W	4	3	20	970.452
34	YKL096C-B	0	0	3	#N/A
35	YKL096W	0	2	2	1328.52
36	YKL096W- <i>f</i>	0	0	0	#N/A
37	YKL097C	9	0	10	#N/A
38	YKL098W	6	9	15	763.051
39	YKL099C	0	9	21	9786.38
40	YKL100C	5	17	12	2858.63
41	YKL100W- <i>f</i>	0	2	2	#N/A
42	YKL101W	7	40	75	10708.1
43	YKL102C	5	3	7	#N/A
44	YKL103C	5	14	18	4488.37
45	YKL104C	16	21	36	20439.6
46	YKL105C	5	29	56	4411.3
47	YKL106C-A	0	2	6	#N/A
48	YKL106W	8	9	18	4979.06
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2	YKL107W	3	4	18	1161.77
3	YKL108W	2	8	35	1055.82
4	YKL109W	2	18	16	867.372
5	YKL110C	6	6	11	6179.64
6	YKL111C	3	12	8	#N/A
7	YKL112W	3	39	20	7003.28
8	YKL113C	7	7	21	6102.85
9	YKL114C	5	8	12	9066.52
10	YKL115C	2	4	8	#N/A
11	YKL116C	9	8	30	1990.36
12	YKL117W	1	6	3	7021.34
13	YKL118W	4	1	5	#N/A
14	YKL119C	2	3	7	937.094
15	YKL120W	3	5	10	4346.92
16	YKL121W	18	31	38	1343.05
17	YKL122C	0	2	5	2554.93
18	YKL123W	0	3	9	#N/A
19	YKL124W	2	10	25	1026.82
20	YKL125W	10	8	25	1086.64
21	YKL126W	5	13	26	8020.63
22	YKL127W	7	10	23	10544.6
23	YKL128C	4	15	17	6759.81
24	YKL129C	10	24	57	13037.9
25	YKL130C	4	5	7	918.346
26	YKL131W	11	3	9	#N/A
27	YKL132C	14	9	22	#N/A
28	YKL133C	5	10	23	590.163
29	YKL134C	17	17	31	2622.88
30	YKL135C	14	11	26	8304.96
31	YKL136W	4	0	2	#N/A
32	YKL137W	5	1	5	1495.25
33	YKL138C	1	3	10	1592.52
34	YKL138C-A	1	2	2	751.033
35	YKL139W	6	11	28	3642.59
36	YKL140W	6	19	24	3829.76
37	YKL141W	0	5	9	699.217
38	YKL142W	0	2	9	7250.94
39	YKL143W	0	7	22	9719.52
40	YKL144C	4	2	8	1619.08
41	YKL145W	6	3	33	16222.8
42	YKL145W- <i>f</i>	0	2	1	#N/A
43	YKL146W	9	18	25	2582.3
44	YKL147C	8	3	9	#N/A
45	YKL148C	11	26	39	4176.77
46	YKL149C	5	16	23	2055.73
47	YKL150W	1	10	7	4718.23
48	YKL151C	12	7	16	1820.97
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2	YKL152C	0	4	12	91469.6
3	YKL153W	0	3	9	#N/A
4	YKL154W	3	1	9	1859.15
5	YKL155C	6	17	41	2578.32
6	YKL156C-A	2	1	1	#N/A
7	YKL156W	5	3	4	14.367
8	YKL157W	7	15	36	20131.7
9	YKL159C	4	5	9	843.049
10	YKL160W	5	1	8	879.403
11	YKL161C	12	17	17	#N/A
12	YKL162C	8	7	16	193.627
13	YKL162C-A	0	3	2	#N/A
14	YKL163W	4	2	4	187.497
15	YKL164C	4	2	3	734.251
16	YKL165C	5	26	30	6442.06
17	YKL165C-A	1	2	6	#N/A
18	YKL166C	4	11	17	3588.84
19	YKL167C	1	6	7	2101.07
20	YKL168C	16	26	50	2103.78
21	YKL169C	9	3	5	#N/A
22	YKL170W	7	1	9	698.8
23	YKL171W	10	26	51	1034.9
24	YKL172W	0	11	27	14401.6
25	YKL173W	9	17	40	10572.1
26	YKL174C	8	13	15	1031.33
27	YKL175W	14	32	13	665.068
28	YKL176C	10	13	44	1285.98
29	YKL177W	4	7	2	#N/A
30	YKL178C	10	11	16	2958.72
31	YKL179C	1	9	31	13312.4
32	YKL180W	0	4	19	3095.92
33	YKL181W	8	12	26	9567.67
34	YKL182W	15	39	73	109291
35	YKL183C-A	2	3	2	398.232
36	YKL183W	6	6	14	648.364
37	YKL184W	11	12	16	11828.1
38	YKL185W	11	15	38	1824.78
39	YKL186C	3	3	8	2361.56
40	YKL187C	4	10	18	236.944
41	YKL188C	11	16	48	608.908
42	YKL189W	7	7	15	4187.72
43	YKL190W	0	0	10	3388.84
44	YKL191W	8	17	19	3923.08
45	YKL192C	1	1	8	2755.36
46	YKL193C	1	9	8	6058.53
47	YKL194C	5	12	23	2439.03
48	YKL195W	8	6	13	5689.09
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2	YKL196C	3	3	8	8723.77
3	YKL197C	16	24	42	3845.1
4	YKL198C	12	27	34	1482.72
5	YKL201C	6	23	45	3344.31
6	YKL202W	3	9	5	#N/A
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8	YKL203C	31	65	120	9350.8
9	YKL204W	0	11	21	5618.57
10	YKL205W	19	11	21	9331.76
11	YKL206C	4	2	8	5098.71
12	YKL207W	2	4	4	2267.97
13	YKL208W	3	6	16	32.005
14	YKL209C	26	24	53	#N/A
15	YKL210W	10	16	33	32567.5
16	YKL211C	9	15	18	9548.56
17	YKL212W	4	20	30	20909.6
18	YKL213C	8	10	19	7599.72
19	YKL214C	1	8	23	1853.75
20	YKL215C	14	28	58	17091.2
21	YKL216W	3	3	9	19866.1
22	YKL217W	11	9	23	772.044
23	YKL218C	3	7	15	783.593
24	YKL219W	9	9	16	1270.84
25	YKL220C	15	18	28	#N/A
26	YKL221W	8	11	18	#N/A
27	YKL222C	16	25	38	395.301
28	YKL223W	8	2	8	#N/A
29	YKL224C	0	2	5	#N/A
30	YKL225W	3	10	2	#N/A
31	YKR001C	2	13	31	25190.1
32	YKR002W	8	10	30	8345.33
33	YKR003W	3	12	19	8040.16
34	YKR004C	7	8	15	1200.6
35	YKR005C	13	6	23	#N/A
36	YKR006C	3	4	12	5397.1
37	YKR007W	2	6	9	993.119
38	YKR008W	3	13	15	12866.6
39	YKR009C	6	18	28	4223.23
40	YKR010C	5	15	34	5102.78
41	YKR011C	6	8	11	1037.6
42	YKR012C	6	1	10	#N/A
43	YKR013W	4	6	2	274.962
44	YKR014C	3	2	9	5518.68
45	YKR015C	10	12	34	507.837
46	YKR016W	10	6	23	3600.9
47	YKR017C	27	20	18	1307.3
48	YKR018C	7	15	31	10866.8
49	YKR019C	4	19	45	1046.64
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2	YKR020W	0	3	7	2466.2
3	YKR021W	4	27	33	4974.58
4	YKR022C	2	6	16	152.163
5	YKR023W	8	14	26	4837.43
6	YKR024C	9	27	40	9505.48
7	YKR025W	0	4	12	7046.76
8	YKR026C	3	6	16	3879.77
9	YKR027W	20	11	37	1715.76
10	YKR028W	8	18	32	6873.95
11	YKR029C	13	19	41	5756.1
12	YKR030W	4	6	11	930.931
13	YKR031C	16	60	107	8127.13
14	YKR032W	6	3	5	#N/A
15	YKR033C	2	3	5	#N/A
16	YKR034W	8	9	10	#N/A
17	YKR035C	15	0	7	#N/A
18	YKR035W-/	1	0	11	3486.36
19	YKR036C	7	19	30	5055.27
20	YKR037C	2	6	23	1984.14
21	YKR038C	10	10	19	3708.22
22	YKR039W	6	8	19	451.165
23	YKR040C	6	5	8	#N/A
24	YKR041W	3	8	23	54.937
25	YKR042W	10	5	3	1640.04
26	YKR043C	4	9	22	10551.5
27	YKR044W	3	14	23	437.633
28	YKR045C	1	4	18	61.588
29	YKR046C	0	4	7	2699.29
30	YKR047W	4	5	15	#N/A
31	YKR048C	4	4	14	8238.84
32	YKR049C	3	2	8	691.941
33	YKR050W	11	21	55	#N/A
34	YKR051W	11	7	20	#N/A
35	YKR052C	6	8	9	882.31
36	YKR053C	11	14	21	#N/A
37	YKR054C	49	83	177	11129.5
38	YKR055W	6	5	13	1446.14
39	YKR056W	11	11	32	7367.13
40	YKR057W	1	1	7	224.98
41	YKR058W	5	10	8	654.509
42	YKR059W	3	4	24	#N/A
43	YKR060W	4	6	16	5587.49
44	YKR061W	10	7	27	#N/A
45	YKR062W	3	4	15	5100.33
46	YKR063C	3	8	30	2753.05
47	YKR064W	22	21	43	2546.15
48	YKR065C	2	3	9	1171.09
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2	YKR066C	1	8	14	8306.91
3	YKR067W	8	16	41	3317.13
4	YKR068C	6	2	7	4965.67
5	YKR069W	7	10	29	420.859
6	YKR070W	2	6	16	2621.16
7	YKR071C	9	3	4	9734
8	YKR072C	3	8	18	6010.14
9	YKR073C	4	3	4	#N/A
10	YKR074W	0	5	7	4833.83
11	YKR075C	5	21	14	832.669
12	YKR075W-/	2	1	1	#N/A
13	YKR076W	3	14	20	1548.39
14	YKR077W	0	6	16	499.623
15	YKR078W	5	11	27	1468.8
16	YKR079C	8	27	29	4747.21
17	YKR080W	6	5	12	3581.95
18	YKR081C	2	7	17	6456.29
19	YKR082W	15	23	27	18529.6
20	YKR083C	0	0	3	216.269
21	YKR084C	5	13	24	8977.12
22	YKR085C	3	4	17	2936.8
23	YKR086W	14	17	52	5117.96
24	YKR087C	5	8	20	2766.94
25	YKR088C	1	6	16	465.963
26	YKR089C	9	23	51	4711.62
27	YKR090W	16	10	36	8001.89
28	YKR091W	2	7	13	#N/A
29	YKR092C	0	1	9	5616.21
30	YKR093W	12	8	13	2587.91
31	YKR094C	5	2	10	#N/A
32	YKR095W	8	21	86	37039.6
33	YKR095W-/	0	1	5	2591.71
34	YKR096W	18	22	59	2348.79
35	YKR097W	10	16	21	3330.39
36	YKR098C	12	23	34	137.464
37	YKR099W	3	26	38	3239.99
38	YKR100C	2	6	21	2994.65
39	YKR101W	12	9	39	1391.01
40	YKR102W	35	9	11	#N/A
41	YKR103W	21	12	54	#N/A
42	YKR104W	5	5	21	672.268
43	YKR105C	9	7	14	7.869
44	YKR106W	11	8	23	#N/A
45	YLL001W	10	9	38	8717.5
46	YLL002W	4	6	28	616.934
47	YLL003W	8	28	72	1340.45
48	YLL004W	4	15	24	3364.15
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2	YLL005C	13	21	38	#N/A
3	YLL006W	3	9	17	2239.38
4	YLL006W-A	3	1	2	#N/A
5	YLL007C	13	9	29	2711.9
6	YLL008W	1	8	47	16199.1
7	YLL009C	7	1	1	377.109
8	YLL010C	4	11	19	2335.55
9	YLL011W	3	16	38	15116.8
10	YLL012W	7	21	23	2103.25
11	YLL013C	3	26	22	9576.53
12	YLL014W	1	2	2	#N/A
13	YLL015W	17	16	72	7386.51
14	YLL016W	12	24	43	#N/A
15	YLL017W	3	3	6	#N/A
16	YLL018C	3	12	36	27446.5
17	YLL018C-A	4	3	5	#N/A
18	YLL019C	12	20	37	372.01
19	YLL019W-A	0	1	2	#N/A
20	YLL020C	3	2	3	#N/A
21	YLL021W	5	25	50	29303.6
22	YLL022C	2	10	19	3008.4
23	YLL023C	2	5	15	2423.97
24	YLL024C	3	5	26	54990.3
25	YLL025W	0	2	5	#N/A
26	YLL026W	6	15	54	15892.5
27	YLL027W	5	3	15	1322.28
28	YLL028W	12	11	20	1099.84
29	YLL029W	16	20	42	6015.65
30	YLL030C	3	2	4	#N/A
31	YLL031C	12	30	28	2206.97
32	YLL032C	9	16	29	5499.78
33	YLL033W	4	4	17	624.819
34	YLL034C	9	4	50	15064.9
35	YLL035W	6	21	26	1479.24
36	YLL036C	9	5	17	2862.36
37	YLL037W	5	3	6	#N/A
38	YLL038C	1	3	20	1580.5
39	YLL039C	0	5	20	#N/A
40	YLL040C	21	57	128	28939
41	YLL041C	15	4	15	1801.58
42	YLL042C	3	5	6	159.692
43	YLL043W	6	18	29	1749.23
44	YLL044W	1	1	5	#N/A
45	YLL045C	1	3	11	16294.9
46	YLL046C	2	1	12	#N/A
47	YLL047W	5	3	4	#N/A
48	YLL048C	15	29	76	20550.1
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2	YLL049W	5	1	7	134.954
3	YLL050C	1	1	7	8669.87
4	YLL051C	13	29	28	447.489
5	YLL052C	8	7	5	#N/A
6	YLL053C	2	3	5	#N/A
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8	YLL054C	13	20	37	625.806
9	YLL055W	4	3	15	#N/A
10	YLL056C	4	7	13	#N/A
11	YLL057C	1	19	22	#N/A
12					
13	YLL058W	11	6	25	4128.8
14	YLL059C	6	6	8	#N/A
15	YLL060C	2	6	13	#N/A
16	YLL061W	17	8	25	845.825
17	YLL062C	4	8	12	1976.14
18					
19	YLL063C	9	7	23	#N/A
20	YLL064C	0	2	4	#N/A
21	YLL065W	3	12	1	#N/A
22	YLL066C	24	22	81	#N/A
23	YLL066W-A	4	6	9	#N/A
24	YLL066W-B	1	11	1	#N/A
25					
26	YLL067C	24	21	79	#N/A
27	YLL067W-A	4	6	9	#N/A
28	YLR001C	11	20	32	810.574
29	YLR002C	8	9	36	10008
30	YLR003C	2	1	13	7656.67
31	YLR004C	14	9	15	24.49
32	YLR005W	20	18	28	3388.44
33	YLR006C	4	15	23	1403.64
34	YLR007W	10	8	15	755.456
35	YLR008C	0	3	2	1733.72
36	YLR009W	5	3	26	3526.45
37	YLR010C	5	5	10	#N/A
38	YLR011W	3	5	7	1256.39
39	YLR012C	1	0	8	#N/A
40	YLR013W	6	3	10	#N/A
41	YLR014C	16	11	45	980.663
42	YLR015W	7	9	27	5584.61
43	YLR016C	4	5	15	881.431
44	YLR017W	6	11	15	5519.35
45	YLR018C	1	12	12	3818.23
46	YLR019W	4	16	14	548.962
47	YLR020C	2	15	26	3063.28
48	YLR021W	2	3	5	2122.46
49	YLR022C	5	4	9	7556.71
50	YLR023C	8	18	24	333.139
51	YLR024C	50	45	82	5333.9
52	YLR025W	0	3	8	4965.3
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2	YLR026C	0	4	16	3327.13
3	YLR027C	4	13	13	11011.5
4	YLR028C	7	12	25	12880.2
5	YLR029C	1	5	33	21128.5
6	YLR030W	3	7	14	#N/A
7	YLR031W	2	2	16	#N/A
8	YLR032W	16	21	64	7540.08
9	YLR033W	5	6	24	3937.69
10	YLR034C	10	7	10	1965.09
11	YLR035C	9	10	33	495.13
12	YLR035C-A	11	40	52	#N/A
13	YLR036C	8	3	7	228.388
14	YLR037C	0	2	5	#N/A
15	YLR038C	4	3	2	375.842
16	YLR039C	17	25	24	7345.6
17	YLR040C	0	5	2	#N/A
18	YLR041W	3	1	6	#N/A
19	YLR042C	1	1	1	#N/A
20	YLR043C	2	0	0	8728.07
21	YLR044C	4	12	15	135265
22	YLR045C	6	10	44	9627.28
23	YLR046C	3	5	13	#N/A
24	YLR047C	12	29	41	593.142
25	YLR048W	1	5	15	6359.46
26	YLR049C	7	12	22	577.248
27	YLR050C	3	4	5	1176.06
28	YLR051C	0	3	17	11141.8
29	YLR052W	0	8	8	1899.3
30	YLR053C	1	4	3	#N/A
31	YLR054C	19	19	36	#N/A
32	YLR055C	6	15	21	2412.96
33	YLR056W	4	18	14	6850.75
34	YLR057W	7	11	36	5955.46
35	YLR058C	5	16	23	25531.5
36	YLR059C	4	10	17	2535.62
37	YLR060W	9	15	25	27483.3
38	YLR061W	0	1	4	12939.2
39	YLR062C	1	0	4	#N/A
40	YLR063W	7	6	14	3399.95
41	YLR064W	3	3	14	1413.42
42	YLR065C	2	0	11	662.704
43	YLR066W	0	1	5	2458.17
44	YLR067C	11	26	43	1293.12
45	YLR068W	0	0	17	1570.04
46	YLR069C	10	13	42	6060
47	YLR070C	7	9	11	62.035
48	YLR071C	9	27	41	7790.04
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2	YLR072W	8	12	32	4209.15
3	YLR073C	3	2	10	191.332
4	YLR074C	2	5	9	5098.99
5	YLR075W	4	5	22	37958.6
6	YLR076C	0	2	6	#N/A
7					
8	YLR077W	11	17	28	2392.07
9	YLR078C	0	4	10	3518.94
10	YLR079W	0	4	23	1012.15
11	YLR080W	3	3	18	1501.81
12					
13	YLR081W	15	7	15	#N/A
14	YLR082C	3	8	22	1920.72
15	YLR083C	10	14	20	9659.35
16	YLR084C	10	6	22	1789.49
17	YLR085C	9	12	16	1818.68
18					
19	YLR086W	9	22	74	9549.94
20	YLR087C	30	68	115	3993.53
21	YLR088W	6	13	23	1888.48
22	YLR089C	6	18	26	2823.62
23	YLR090W	13	15	16	3308.75
24	YLR091W	2	13	17	973.653
25					
26	YLR092W	14	17	32	#N/A
27	YLR093C	3	4	7	3132.7
28	YLR094C	6	15	28	1132.56
29	YLR095C	12	20	41	5232.35
30	YLR096W	6	33	63	7183.21
31	YLR097C	6	8	18	1073.74
32	YLR098C	10	9	29	882.023
33	YLR099C	5	13	14	1143.52
34	YLR099W-/-	0	1	4	535.522
35	YLR100W	1	3	13	9000.85
36	YLR101C	1	5	8	#N/A
37	YLR102C	6	10	19	163.557
38	YLR103C	7	9	34	1926.52
39	YLR104W	8	4	3	1102.47
40	YLR105C	5	12	25	1083.5
41	YLR106C	39	79	195	71161.1
42	YLR107W	9	12	17	1442.86
43	YLR108C	15	15	19	5281.31
44	YLR109W	3	3	1	34975.1
45	YLR110C	3	2	0	10.542
46	YLR111W	1	3	7	#N/A
47	YLR112W	6	6	13	#N/A
48	YLR113W	6	16	16	5920.67
49	YLR114C	6	15	24	9174.71
50	YLR115W	10	12	34	4750.35
51	YLR116W	9	7	36	1541.93
52	YLR117C	4	9	42	2290.33
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2	YLR118C	2	7	3	1197.64
3	YLR119W	1	6	12	3872.01
4	YLR120C	4	6	12	1125.76
5	YLR120W-/	1	0	2	#N/A
6	YLR121C	4	5	12	205.753
7	YLR122C	7	1	8	#N/A
8	YLR123C	5	9	8	#N/A
9	YLR124W	5	3	5	#N/A
10	YLR125W	2	2	4	#N/A
11	YLR126C	5	4	9	1362.92
12	YLR127C	12	20	35	590.763
13	YLR128W	5	5	10	1047.15
14	YLR129W	13	24	30	18315.1
15	YLR130C	6	15	11	1841.51
16	YLR131C	8	28	38	1730.49
17	YLR132C	5	8	13	1268.52
18	YLR133W	6	8	30	5306.37
19	YLR134W	4	14	19	874.681
20	YLR135W	6	6	30	103.03
21	YLR136C	9	3	8	#N/A
22	YLR137W	4	9	20	640.299
23	YLR138W	12	14	58	5751.66
24	YLR139C	3	17	17	2917.76
25	YLR140W	4	3	7	#N/A
26	YLR141W	5	13	37	66.041
27	YLR142W	5	9	15	353.739
28	YLR143W	15	20	26	4387.67
29	YLR144C	8	19	27	5789.14
30	YLR145W	5	3	17	140.038
31	YLR146C	5	7	9	1334.74
32	YLR146W-/	1	1	3	#N/A
33	YLR147C	0	2	7	678.125
34	YLR148W	12	20	24	6239.71
35	YLR149C	10	21	44	939.205
36	YLR149C-A	2	0	2	#N/A
37	YLR150W	0	1	20	28883.4
38	YLR151C	5	11	19	515.338
39	YLR152C	11	7	21	61.003
40	YLR153C	6	22	31	27488.6
41	YLR154C	0	0	5	241.255
42	YLR154C-G	3	1	9	#N/A
43	YLR154C-H	1	0	2	#N/A
44	YLR154W-/	1	3	3	#N/A
45	YLR154W-E	1	3	8	#N/A
46	YLR154W-C	3	7	10	#N/A
47	YLR154W-E	1	1	8	#N/A
48	YLR154W-F	1	0	1	#N/A
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2	YLR155C	2	4	10	#N/A
3	YLR156C-A	1	0	2	#N/A
4	YLR156W	5	6	6	#N/A
5	YLR157C	2	4	10	#N/A
6	YLR157C-A	4	13	14	#N/A
7	YLR157C-B	14	59	71	#N/A
8	YLR157C-C	1	0	2	#N/A
9	YLR157W-I	1	2	3	#N/A
10	YLR157W-E	4	4	3	#N/A
11	YLR158C	2	4	10	#N/A
12	YLR159C-A	1	0	2	#N/A
13	YLR159W	5	6	6	#N/A
14	YLR160C	2	4	10	#N/A
15	YLR161W	5	6	6	#N/A
16	YLR162W	4	4	10	#N/A
17	YLR162W-/	3	3	4	#N/A
18	YLR163C	1	9	23	4626.21
19	YLR163W-/	1	0	2	#N/A
20	YLR164W	3	6	7	78.642
21	YLR165C	5	12	13	366.129
22	YLR166C	4	17	26	7482.02
23	YLR167W	4	5	8	12105.5
24	YLR168C	4	5	10	478.47
25	YLR169W	5	3	8	#N/A
26	YLR170C	3	4	7	619.549
27	YLR171W	5	2	4	#N/A
28	YLR172C	5	6	13	10409.9
29	YLR173W	7	14	23	1269.25
30	YLR174W	1	9	19	2804.3
31	YLR175W	9	8	27	13975.1
32	YLR176C	13	15	24	893.701
33	YLR177W	4	12	22	1533.81
34	YLR178C	2	6	3	1039.22
35	YLR179C	2	3	3	9339.91
36	YLR180W	5	8	15	13461
37	YLR181C	4	5	6	5710.05
38	YLR182W	6	18	25	4058.6
39	YLR183C	8	12	30	3209.23
40	YLR184W	1	4	14	#N/A
41	YLR185W	4	5	11	4994.23
42	YLR186W	6	6	13	9681.82
43	YLR187W	4	19	42	5883.79
44	YLR188W	5	8	44	3319.45
45	YLR189C	6	26	55	4904.22
46	YLR190W	6	4	23	2935.3
47	YLR191W	0	3	16	2831.97
48	YLR192C	0	2	14	13955.7
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2	YLR193C	0	4	11	395.556
3	YLR194C	1	1	0	#N/A
4	YLR195C	6	7	19	10321.7
5	YLR196W	4	13	18	18643.5
6	YLR197W	4	8	18	33185.9
7					
8	YLR198C	4	5	4	#N/A
9	YLR199C	6	2	4	4658.53
10	YLR200W	1	0	7	1055.85
11	YLR201C	2	12	12	1865.98
12					
13	YLR202C	3	3	7	#N/A
14	YLR203C	4	17	25	4798.58
15	YLR204W	1	1	14	#N/A
16	YLR205C	3	6	16	196.604
17	YLR206W	2	7	37	2443.75
18					
19	YLR207W	7	22	41	4208.13
20	YLR208W	3	12	8	6914.56
21	YLR209C	5	10	14	3059.71
22	YLR210W	3	10	27	222.157
23					
24	YLR211C	1	0	9	947.027
25	YLR212C	3	10	19	876.083
26	YLR213C	10	7	18	#N/A
27	YLR214W	17	16	31	1185.4
28	YLR215C	4	8	14	2190.32
29					
30	YLR216C	7	6	9	15953.1
31	YLR217W	1	5	6	#N/A
32	YLR218C	6	2	6	424.269
33	YLR219W	0	24	37	5095.81
34	YLR220W	0	2	11	2468.15
35	YLR221C	0	2	9	5009.91
36					
37	YLR222C	13	19	24	10697.9
38	YLR222C-A	0	4	1	#N/A
39	YLR223C	2	26	37	1378.76
40					
41	YLR224W	7	10	15	461.332
42	YLR225C	7	6	12	4293.61
43	YLR226W	9	4	13	2573.39
44	YLR227C	16	10	14	#N/A
45	YLR227W-/-	4	14	14	#N/A
46					
47	YLR227W-E	14	62	70	1775.71
48	YLR228C	8	23	26	2333.73
49	YLR229C	7	3	9	938.795
50					
51	YLR230W	2	8	11	#N/A
52	YLR231C	7	12	17	2299.74
53	YLR232W	3	2	2	#N/A
54	YLR233C	13	18	45	#N/A
55	YLR234W	11	17	42	1236.48
56	YLR235C	3	6	8	#N/A
57	YLR236C	5	5	7	#N/A
58					
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2	YLR237W	13	12	14	1838.3
3	YLR238W	5	12	24	1333.9
4	YLR239C	8	5	17	1954.64
5	YLR240W	11	16	44	2008.44
6	YLR241W	9	16	33	2169.33
7	YLR242C	8	7	9	153.92
8	YLR243W	5	5	7	1151.75
9	YLR244C	14	14	15	21472.6
10	YLR245C	9	3	7	1433.87
11	YLR246W	11	15	21	107.791
12	YLR247C	30	43	84	5309.81
13	YLR248W	5	12	21	8724.92
14	YLR249W	15	24	45	163138
15	YLR250W	0	16	9	3217.55
16	YLR251W	1	4	9	583.562
17	YLR252W	2	3	7	#N/A
18	YLR253W	9	18	31	2253.85
19	YLR254C	2	2	9	738.17
20	YLR255C	4	2	17	#N/A
21	YLR256W	23	43	54	2340.73
22	YLR256W-/-	4	14	14	#N/A
23	YLR257W	1	4	21	5033.24
24	YLR258W	7	24	44	2445.39
25	YLR259C	5	2	28	29579.4
26	YLR260W	13	17	37	3579.72
27	YLR261C	2	0	9	#N/A
28	YLR262C	3	1	10	5271.62
29	YLR262C-A	0	0	1	6530.84
30	YLR263W	11	15	28	#N/A
31	YLR264C-A	0	0	3	#N/A
32	YLR264W	0	0	10	9874.28
33	YLR265C	6	5	13	955.086
34	YLR266C	15	10	32	#N/A
35	YLR267W	13	9	20	690.797
36	YLR268W	2	2	7	2872.61
37	YLR269C	3	1	9	#N/A
38	YLR270W	4	10	16	6560.57
39	YLR271W	4	3	19	593.739
40	YLR272C	23	17	40	4312.52
41	YLR273C	9	14	18	196.39
42	YLR274W	9	12	46	6084.89
43	YLR275W	1	4	9	1368.19
44	YLR276C	5	13	26	14523.2
45	YLR277C	10	23	33	5621.34
46	YLR278C	20	31	59	2877.01
47	YLR279W	6	4	20	#N/A
48	YLR280C	2	1	20	#N/A
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2	YLR281C	3	3	24	95.518
3	YLR282C	5	6	7	#N/A
4	YLR283W	7	7	18	591.891
5	YLR284C	6	4	11	1856.47
6	YLR285C-A	2	3	4	#N/A
7	YLR285W	1	12	5	4914.96
8	YLR286C	12	2	4	1657.18
9	YLR286W-/	3	0	3	#N/A
10	YLR287C	5	3	10	7137
11	YLR287C-A	0	1	7	11808.5
12	YLR288C	10	13	26	1063.98
13	YLR289W	5	15	41	1392.05
14	YLR290C	2	5	12	3093.15
15	YLR291C	3	9	21	7848.97
16	YLR292C	3	2	9	4162.17
17	YLR293C	3	4	8	15262.6
18	YLR294C	1	3	2	#N/A
19	YLR295C	1	2	6	469.499
20	YLR296W	3	4	8	#N/A
21	YLR297W	1	3	1	#N/A
22	YLR298C	4	12	21	1082.9
23	YLR299C-A	0	2	1	#N/A
24	YLR299W	6	18	26	1346.13
25	YLR300W	8	11	17	8316.96
26	YLR301W	1	4	9	12738.4
27	YLR302C	3	6	7	#N/A
28	YLR303W	1	16	12	15875.3
29	YLR304C	7	17	33	14846.3
30	YLR305C	28	44	75	11546.1
31	YLR306W	3	2	8	1373.25
32	YLR307C-A	3	2	5	#N/A
33	YLR307W	7	6	13	#N/A
34	YLR308W	8	14	10	#N/A
35	YLR309C	3	11	32	15555
36	YLR310C	12	33	66	6348.51
37	YLR311C	3	3	7	#N/A
38	YLR312C	4	13	29	105.148
39	YLR312W-/	6	7	10	1931.96
40	YLR313C	1	7	28	#N/A
41	YLR314C	3	13	17	11660.5
42	YLR315W	0	3	8	243.371
43	YLR316C	9	4	20	1899.11
44	YLR317W	7	9	12	#N/A
45	YLR318W	18	22	36	#N/A
46	YLR319C	5	14	38	9588.52
47	YLR320W	19	32	68	171.951
48	YLR321C	3	13	23	3669.46
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2	YLR322W	8	6	6	#N/A
3	YLR323C	10	5	11	2485.08
4	YLR324W	1	4	27	3847.22
5	YLR325C	0	0	6	11144.8
6	YLR326W	6	8	14	2010.32
7	YLR327C	0	4	6	468.491
8	YLR328W	4	21	25	3015.96
9	YLR329W	3	4	11	#N/A
10	YLR330W	5	14	14	9272.62
11	YLR331C	3	1	5	#N/A
12	YLR332W	3	4	11	773.747
13	YLR333C	0	3	7	#N/A
14	YLR334C	3	4	3	#N/A
15	YLR335W	1	1	15	23050.6
16	YLR336C	5	12	49	6634.55
17	YLR337C	0	15	19	6420.31
18	YLR338W	9	0	8	#N/A
19	YLR339C	4	0	4	#N/A
20	YLR340W	0	4	13	67830.8
21	YLR341W	9	9	13	#N/A
22	YLR342W	33	43	102	17865.6
23	YLR342W-/	1	1	2	#N/A
24	YLR343W	16	9	18	#N/A
25	YLR344W	0	2	12	1671.53
26	YLR345W	6	14	27	2172.81
27	YLR346C	2	1	5	#N/A
28	YLR347C	11	6	27	7016.64
29	YLR347W-/	0	0	2	#N/A
30	YLR348C	3	4	15	4906.67
31	YLR349W	6	5	6	#N/A
32	YLR350W	0	5	12	354.372
33	YLR351C	3	8	13	4975.1
34	YLR352W	18	30	42	2119.89
35	YLR353W	5	16	35	702.66
36	YLR354C	2	3	10	24481.3
37	YLR355C	3	5	26	46489.9
38	YLR356W	3	4	3	456.913
39	YLR357W	5	16	66	9860.13
40	YLR358C	8	5	8	#N/A
41	YLR359W	4	12	31	18388.8
42	YLR360W	5	11	20	613.816
43	YLR361C	9	18	24	2530.71
44	YLR361C-A	1	6	7	1361.7
45	YLR362W	8	21	29	3033.45
46	YLR363C	6	2	11	770.154
47	YLR363W-/	0	2	6	799.068
48	YLR364C-A	1	2	4	#N/A
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2	YLR364W	2	2	4	661.589
3	YLR365W	2	7	8	#N/A
4	YLR366W	2	5	13	#N/A
5	YLR367W	1	4	9	#N/A
6	YLR368W	9	14	44	#N/A
7	YLR369W	1	4	29	4893.9
8	YLR370C	2	3	10	3351.58
9	YLR371W	15	54	71	3363.15
10	YLR372W	5	10	7	2602.69
11	YLR373C	9	22	38	5418.09
12	YLR374C	6	6	7	#N/A
13	YLR375W	10	19	13	1655.37
14	YLR376C	4	2	13	204.911
15	YLR377C	5	8	15	2360.72
16	YLR378C	3	1	19	4193.66
17	YLR379W	1	1	10	#N/A
18	YLR380W	2	18	14	12835.9
19	YLR381W	14	20	29	946.884
20	YLR382C	12	16	35	6228.65
21	YLR383W	11	14	76	5684.9
22	YLR384C	14	24	66	20348.1
23	YLR385C	2	3	6	1225.43
24	YLR386W	13	15	37	5239.83
25	YLR387C	9	11	28	6733.93
26	YLR388W	4	3	8	3771.81
27	YLR389C	9	29	34	13584.8
28	YLR390W	2	2	6	422.942
29	YLR390W-/-	8	2	1	207.405
30	YLR392C	4	7	27	1051.51
31	YLR393W	3	3	15	2049.63
32	YLR394W	10	14	28	175.348
33	YLR395C	2	2	5	32.243
34	YLR396C	7	15	25	3060.51
35	YLR397C	7	14	38	12519.3
36	YLR398C	12	26	67	19800
37	YLR399C	2	10	38	12920.9
38	YLR399W-/-	2	0	1	#N/A
39	YLR400W	10	5	13	#N/A
40	YLR401C	14	13	43	12061.5
41	YLR402W	2	3	2	#N/A
42	YLR403W	7	36	21	1843.52
43	YLR404W	5	6	13	657.05
44	YLR405W	14	11	21	1963.26
45	YLR406C	0	3	11	3573.01
46	YLR406C-A	0	3	2	#N/A
47	YLR407W	1	3	10	803.473
48	YLR408C	2	3	7	379.571
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2	YLR409C	8	24	50	7275.56
3	YLR410W	11	26	54	20665.8
4	YLR410W-/	3	18	14	#N/A
5	YLR410W-E	15	65	74	#N/A
6	YLR411W	11	2	10	#N/A
7	YLR412C-A	2	3	3	#N/A
8	YLR412W	3	7	8	1474.1
9	YLR413W	9	7	10	7653.86
10	YLR414C	7	4	6	1745.57
11	YLR415C	2	5	7	#N/A
12	YLR416C	5	11	5	#N/A
13	YLR417W	12	11	27	2938.92
14	YLR418C	3	10	20	3701.62
15	YLR419W	14	24	71	13892.6
16	YLR420W	6	12	6	17643.3
17	YLR421C	2	0	6	6443.1
18	YLR422W	31	48	96	7244.56
19	YLR423C	4	3	14	1444.07
20	YLR424W	8	17	28	2770.18
21	YLR425W	19	26	57	1730.92
22	YLR426W	11	3	22	170.64
23	YLR427W	12	21	33	3186.29
24	YLR428C	2	4	6	#N/A
25	YLR429W	0	12	24	17089.2
26	YLR430W	31	42	110	16256.5
27	YLR431C	4	12	20	898.261
28	YLR432W	7	7	21	11765.6
29	YLR433C	10	12	26	5516.68
30	YLR434C	4	6	6	#N/A
31	YLR435W	1	2	6	2881.62
32	YLR436C	8	36	45	2253.98
33	YLR437C	0	2	10	520.679
34	YLR437C-A	4	2	2	#N/A
35	YLR438C-A	2	1	6	996.124
36	YLR438W	8	20	12	7542.31
37	YLR439W	3	12	20	1493.77
38	YLR440C	8	15	21	5265.08
39	YLR441C	1	6	15	57059.9
40	YLR442C	7	13	41	6157.83
41	YLR443W	6	7	21	19.806
42	YLR444C	6	0	3	#N/A
43	YLR445W	3	3	10	#N/A
44	YLR446W	11	9	12	345.939
45	YLR447C	6	5	15	8715.21
46	YLR448W	0	2	10	34231
47	YLR449W	1	3	12	9039.26
48	YLR450W	19	21	37	8970.39
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2	YLR451W	14	15	44	1461.49
3	YLR452C	10	23	24	11263.4
4	YLR453C	5	9	13	87.691
5	YLR454W	28	61	99	11128.5
6	YLR455W	4	6	21	4534.3
7	YLR456W	3	6	6	471.816
8	YLR457C	2	1	39	756.384
9	YLR458W	3	2	8	#N/A
10	YLR459W	4	6	10	685.249
11	YLR460C	4	8	10	5907.13
12	YLR461W	0	2	4	#N/A
13	YLR462W	2	3	14	#N/A
14	YLR463C	5	7	16	#N/A
15	YLR464W	7	4	15	#N/A
16	YLR465C	1	7	5	#N/A
17	YLR466C-A	4	6	9	#N/A
18	YLR466C-B	1	1	1	#N/A
19	YLR466W	25	25	93	#N/A
20	YLR467C-A	4	6	9	#N/A
21	YLR467W	36	31	120	#N/A
22	YML001W	4	2	7	6166.92
23	YML002W	11	18	26	#N/A
24	YML003W	4	13	12	#N/A
25	YML004C	7	13	12	4160.18
26	YML005W	6	16	20	2622.58
27	YML006C	3	23	27	969.302
28	YML007C-A	0	1	5	#N/A
29	YML007W	6	9	23	3385.82
30	YML008C	4	8	17	20647.8
31	YML009C	0	1	6	346.236
32	YML009C-A	3	7	9	#N/A
33	YML009W-	1	7	5	#N/A
34	YML010W	3	15	60	24751.3
35	YML011C	5	2	8	1584.19
36	YML012C-A	5	3	6	533.119
37	YML012W	2	3	18	5632.49
38	YML013W	6	14	25	3253.58
39	YML014W	4	9	21	5972.14
40	YML015C	1	3	12	3169.22
41	YML016C	12	24	35	3704.33
42	YML017W	0	16	30	13035.4
43	YML018C	4	7	10	563.807
44	YML019W	7	5	6	1074.09
45	YML020W	4	16	33	2059.51
46	YML021C	1	10	13	3154.86
47	YML022W	1	2	4	8704.45
48	YML023C	14	11	26	1897.34
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2	YML024W	1	1	17	#N/A
3	YML025C	0	5	21	4929.06
4	YML026C	1	7	16	#N/A
5	YML027W	3	12	29	1151.21
6	YML028W	2	2	6	22890.5
7	YML029W	8	19	37	2146.64
8	YML030W	2	1	13	983.458
9	YML031C- <i>A</i>	5	4	6	#N/A
10	YML031W	8	13	32	4684.84
11	YML032C	2	7	26	3751.41
12	YML034C- <i>A</i>	5	1	8	#N/A
13	YML034W	11	11	43	4891.47
14	YML035C	8	31	42	11230.3
15	YML036W	4	1	9	3348.9
16	YML037C	4	8	9	2013.34
17	YML038C	5	7	12	797.374
18	YML039W	14	60	71	#N/A
19	YML040W	4	14	14	#N/A
20	YML041C	7	6	21	945.897
21	YML042W	7	20	25	3289.55
22	YML043C	5	12	31	249.468
23	YML045W	14	61	70	#N/A
24	YML045W-	3	12	14	#N/A
25	YML046W	6	9	22	3331.81
26	YML047C	8	4	12	#N/A
27	YML047W-	5	7	8	#N/A
28	YML048W	2	6	17	14765.4
29	YML049C	23	40	50	6318.49
30	YML050W	5	18	15	890.269
31	YML051W	2	10	15	1599.48
32	YML052W	5	7	14	1241.27
33	YML053C	3	11	6	#N/A
34	YML054C	8	9	26	1163.63
35	YML054C- <i>A</i>	1	6	2	#N/A
36	YML055W	0	1	6	2438.2
37	YML056C	9	7	15	11015.3
38	YML057C- <i>A</i>	5	0	11	#N/A
39	YML057W	10	21	28	4595.3
40	YML058W	1	1	5	2242.62
41	YML058W-	1	1	3	#N/A
42	YML059C	10	50	74	8681.69
43	YML060W	8	9	17	2747.32
44	YML061C	6	17	50	4035.27
45	YML062C	1	5	17	5369.88
46	YML063W	1	6	16	5570.68
47	YML064C	1	5	10	813.49
48	YML065W	6	11	49	6777.67
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2	YML066C	6	5	12	#N/A
3	YML067C	4	3	12	4587.66
4	YML068W	31	8	23	206.524
5	YML069W	3	7	30	16998.2
6	YML070W	5	9	12	20038.8
7	YML071C	6	6	28	6373.68
8	YML072C	8	29	41	31202.1
9	YML073C	0	2	10	14945.1
10	YML074C	0	3	12	8836.83
11	YML075C	17	18	42	7511.81
12	YML076C	19	23	41	3251.51
13	YML077W	3	3	8	444.995
14	YML078W	2	3	7	7427.08
15	YML079W	0	5	5	5193.57
16	YML080W	7	9	22	9954.21
17	YML081C- <i>A</i>	0	0	3	655.839
18	YML081W	20	42	52	4180.98
19	YML082W	12	16	32	4699.24
20	YML083C	12	22	21	#N/A
21	YML084W	5	2	2	#N/A
22	YML085C	11	11	21	12962.7
23	YML086C	8	9	20	14222.1
24	YML087C	5	11	11	10.71
25	YML088W	7	18	38	2222.54
26	YML089C	3	3	9	#N/A
27	YML090W	5	1	4	#N/A
28	YML091C	16	22	35	4948.71
29	YML092C	0	3	9	8532.74
30	YML093W	0	11	56	13382.8
31	YML094C- <i>A</i>	10	2	5	#N/A
32	YML094W	1	2	2	9352.95
33	YML095C	1	2	13	500.391
34	YML096W	8	9	26	5757.41
35	YML097C	5	5	21	3372.78
36	YML098W	2	1	9	1275.02
37	YML099C	15	22	42	799.939
38	YML099W-	2	3	2	#N/A
39	YML100W	7	27	46	7245.24
40	YML100W-	2	1	3	#N/A
41	YML101C	1	4	8	987.221
42	YML101C- <i>A</i>	3	2	4	#N/A
43	YML102W	10	11	21	2563.73
44	YML103C	12	27	34	13744.8
45	YML104C	7	23	46	943.154
46	YML105C	3	5	17	8660.9
47	YML106W	2	2	6	10785.8
48	YML107C	11	12	19	1582.25
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2	YML108W	1	2	1	2460.08
3	YML109W	2	27	46	1870.85
4	YML110C	4	6	14	5985.92
5	YML111W	14	27	44	9273.44
6	YML112W	4	11	14	625.646
7	YML113W	0	11	14	579.098
8	YML114C	1	16	18	2162.99
9	YML115C	3	14	27	3872.77
10	YML116W	6	5	13	#N/A
11	YML116W-	3	2	10	#N/A
12	YML117W	11	26	48	5658.59
13	YML118W	6	20	25	530.386
14	YML119W	3	7	17	1286.37
15	YML120C	0	11	22	1673.31
16	YML121W	5	7	10	2210.8
17	YML122C	8	3	14	#N/A
18	YML123C	12	18	20	22.774
19	YML124C	11	11	21	4810.53
20	YML125C	1	7	13	10918.2
21	YML126C	8	8	17	23385.4
22	YML127W	9	7	25	6793.54
23	YML128C	0	7	11	2540.15
24	YML129C	0	1	2	1112.16
25	YML130C	14	6	23	10061.4
26	YML131W	3	4	6	1956.49
27	YML132W	9	3	14	#N/A
28	YML133C	26	26	92	#N/A
29	YML133W-	0	0	6	#N/A
30	YML133W-	4	6	9	#N/A
31	YMR001C	9	24	43	3205.62
32	YMR001C-/	2	1	2	#N/A
33	YMR002W	4	3	11	1464.55
34	YMR003W	4	7	11	295.969
35	YMR004W	3	9	31	5306.66
36	YMR005W	1	8	22	7094.95
37	YMR006C	10	4	18	2557.38
38	YMR007W	6	2	13	#N/A
39	YMR008C	9	6	19	1311.77
40	YMR009W	4	6	11	1641.64
41	YMR010W	4	5	10	389.773
42	YMR011W	11	2	20	2785.21
43	YMR012W	4	31	40	44213.7
44	YMR013C	8	8	18	481.213
45	YMR013C-/	1	0	2	#N/A
46	YMR013W-	0	1	3	#N/A
47	YMR014W	4	8	28	4400.84
48	YMR015C	12	13	16	14084.1
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2	YMR016C	2	10	22	4546.62
3	YMR017W	7	16	37	#N/A
4	YMR018W	8	15	16	#N/A
5	YMR019W	23	28	51	1176.52
6	YMR020W	11	12	30	1512.18
7	YMR021C	19	14	18	611.978
8	YMR022W	3	2	5	1969.93
9	YMR023C	6	8	24	736.573
10	YMR024W	5	9	20	4470.86
11	YMR025W	4	3	10	414.978
12	YMR026C	8	5	19	1978.2
13	YMR027W	7	7	24	12415.9
14	YMR028W	2	8	18	3044.43
15	YMR029C	2	13	12	6603.24
16	YMR030W	3	12	18	923.624
17	YMR030W-	1	2	6	#N/A
18	YMR031C	2	16	31	20078.2
19	YMR031W-	2	2	7	#N/A
20	YMR032W	4	15	41	1158.61
21	YMR033W	4	8	14	6085.25
22	YMR034C	14	6	13	265.279
23	YMR035W	2	3	10	291.654
24	YMR036C	10	17	39	471.196
25	YMR037C	5	21	28	2311.55
26	YMR038C	7	5	7	11097.9
27	YMR039C	0	3	19	6488.62
28	YMR040W	1	0	14	160.842
29	YMR041C	8	8	17	1114.44
30	YMR042W	1	2	11	162.311
31	YMR043W	1	10	8	157.367
32	YMR044W	5	4	25	2204.19
33	YMR045C	17	66	76	#N/A
34	YMR046C	5	17	18	#N/A
35	YMR046W-	1	2	0	#N/A
36	YMR047C	4	7	19	9413.98
37	YMR048W	1	7	19	1351.92
38	YMR049C	5	19	38	12510.2
39	YMR050C	14	61	71	#N/A
40	YMR051C	3	13	14	#N/A
41	YMR052C-/	2	5	5	#N/A
42	YMR052W	1	2	10	1516.4
43	YMR053C	17	16	46	1073.47
44	YMR054W	7	21	39	5758.16
45	YMR055C	6	3	16	209.769
46	YMR056C	3	3	18	522.039
47	YMR057C	6	4	18	#N/A
48	YMR058W	6	25	15	2523.23
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3	YMR060C	5	4	12	3689.17
4	YMR061W	8	5	30	5683.43
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6	YMR063W	7	6	5	#N/A
7	YMR064W	8	14	25	1161.24
8	YMR065W	9	5	16	#N/A
9	YMR066W	9	13	36	2150.49
10	YMR067C	2	11	13	4547.33
11	YMR068W	6	13	27	530.924
12	YMR069W	9	14	24	522.432
13	YMR070W	4	32	9	2850.29
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15	YMR072W	0	3	9	8986.7
16	YMR073C	4	8	9	1566.5
17	YMR074C	0	1	9	4398.22
18	YMR075C-/	2	1	3	#N/A
19	YMR075W	15	13	25	5860.34
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22	YMR078C	9	13	35	2767.06
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27	YMR083W	7	9	11	13580.9
28	YMR084W	7	10	7	#N/A
29	YMR085W	14	10	19	#N/A
30	YMR086C-/	4	4	13	#N/A
31	YMR086W	2	16	53	15769.4
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33	YMR088C	9	6	19	699.937
34	YMR089C	5	13	49	8944.39
35	YMR090W	2	1	10	1033.27
36	YMR091C	2	10	29	7155.48
37	YMR092C	8	13	20	9798.96
38	YMR093W	5	15	33	7503.81
39	YMR094W	6	8	30	251.056
40	YMR095C	6	8	9	95.356
41	YMR096W	5	6	11	618.428
42	YMR097C	2	7	24	914.571
43	YMR098C	7	17	36	1573.32
44	YMR099C	2	9	5	8537.68
45	YMR100W	14	11	38	1132.26
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47	YMR102C	11	27	52	5239.03
48	YMR103C	3	2	12	#N/A
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2	YMR104C	6	21	27	1578.7
3	YMR105C	6	11	17	2800.65
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6	YMR107W	0	3	9	394.8
7	YMR108W	3	16	30	24744.6
8	YMR109W	9	26	70	13729
9	YMR110C	7	11	20	3808.87
10	YMR111C	2	9	39	1059.99
11	YMR112C	1	1	5	2988.78
12	YMR113W	11	13	19	3120.98
13	YMR114C	4	3	23	1079.96
14	YMR115W	5	9	27	4599.85
15	YMR116C	2	7	10	53534.2
16	YMR117C	0	2	10	2305.47
17	YMR118C	0	7	10	123.975
18	YMR119W	19	8	27	2039.24
19	YMR119W	1	1	7	#N/A
20	YMR120C	6	12	28	8822.71
21	YMR121C	1	5	33	1624.18
22	YMR122C	6	3	15	#N/A
23	YMR122W	0	0	0	384.147
24	YMR123W	1	3	5	#N/A
25	YMR124W	0	13	52	5775.5
26	YMR125W	4	8	38	10387.9
27	YMR126C	6	11	20	126.08
28	YMR127C	10	6	12	494.059
29	YMR128W	10	25	69	22549.8
30	YMR129W	15	29	47	18364
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32	YMR131C	4	10	16	13646.2
33	YMR132C	6	3	11	1816.37
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35	YMR134W	4	7	13	3513.86
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39	YMR137C	14	20	29	464.069
40	YMR138W	7	3	13	645.822
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42	YMR140W	10	11	39	2915.61
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45	YMR142C	0	4	26	38275.6
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11	YMR153W	1	5	19	8100.81
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13	YMR154C	19	14	34	1151.63
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16	YMR157C	5	2	15	2004.63
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18	YMR158C-/	1	1	1	#N/A
19	YMR158W	5	3	8	2516.37
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21	YMR159C	0	3	9	275.859
22	YMR160W	8	17	40	2999.22
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24	YMR161W	0	3	16	5424.03
25	YMR162C	21	33	83	5718.15
26	YMR163C	13	16	40	31.685
27	YMR164C	1	18	20	500.471
28	YMR165C	3	14	38	5031.71
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30	YMR166C	2	9	20	130.855
31	YMR167W	9	12	40	4701.31
32	YMR168C	14	12	29	925.967
33	YMR169C	6	4	10	2432.48
34	YMR170C	6	4	9	1002.94
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36	YMR171C	6	13	25	1247.64
37	YMR172C-/	6	2	6	#N/A
38	YMR172W	2	16	36	803.781
39	YMR173W	0	0	6	1948.55
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41	YMR173W-	3	12	28	#N/A
42	YMR174C	0	2	0	277.556
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44	YMR175W-	4	1	1	#N/A
45	YMR176W	27	31	62	1781.51
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47	YMR177W	5	26	19	1207.34
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49	YMR179W	8	14	31	360.876
50	YMR180C	6	10	24	462.563
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52	YMR181C	1	1	2	82.64
53	YMR182C	4	9	13	76.501
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8	YMR191W	3	8	21	#N/A
9	YMR192W	6	14	29	9943.01
10	YMR193C-/	9	7	3	#N/A
11	YMR193W	0	3	18	2702.21
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13	YMR194C-/	1	2	5	#N/A
14	YMR194C-i	8	1	2	60.305
15	YMR194W	0	1	12	12612.6
16	YMR195W	2	3	3	#N/A
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18	YMR196W	8	25	60	3308.54
19	YMR197C	0	2	14	3344.61
20	YMR198W	12	13	30	1706.1
21	YMR199W	9	12	20	88.317
22	YMR200W	3	3	10	160.065
23	YMR201C	8	13	28	1794.83
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25	YMR202W	2	8	4	1601.76
26	YMR203W	4	4	10	3793.94
27	YMR204C	5	9	18	311.269
28	YMR205C	11	19	52	38149.6
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31	YMR207C	21	43	119	7314.55
32	YMR208W	9	10	9	6583.34
33	YMR209C	6	14	22	4193.31
34	YMR210W	7	12	29	2396.83
35	YMR211W	4	14	23	2853.89
36	YMR212C	10	13	32	9288.84
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39	YMR214W	8	9	16	8706.01
40	YMR215W	6	3	11	5766.39
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42	YMR216C	10	24	35	6161.74
43	YMR217W	5	17	20	40306.2
44	YMR218C	17	16	44	7163.19
45	YMR219W	7	42	59	8447.8
46	YMR220W	6	15	22	3726.93
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48	YMR221C	11	7	18	2597.82
49	YMR222C	1	6	5	1238.17
50	YMR223W	26	21	10	1283.15
51	YMR224C	7	18	34	1622.91
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55	YMR228W	5	6	12	1414.63
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57	YMR229C	12	31	66	73978.9
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4	YMR231W	18	22	42	5821.76
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6	YMR233W	1	3	16	3216.46
7	YMR234W	5	7	14	2936.93
8	YMR235C	5	10	10	17512.5
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10	YMR237W	10	15	26	5767.22
11	YMR238W	10	6	11	2514.13
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13	YMR240C	4	11	25	5718.8
14	YMR241W	3	3	14	4385.06
15	YMR242C	0	7	16	34204.9
16	YMR242W-	0	0	1	#N/A
17	YMR243C	5	25	18	2368.91
18	YMR244C-/	4	2	8	1397.55
19	YMR244W	15	4	4	#N/A
20	YMR245W	9	8	8	#N/A
21	YMR246W	12	14	23	14243.5
22	YMR247C	21	19	51	12052
23	YMR247W-	2	4	1	#N/A
24	YMR250W	8	25	23	2515
25	YMR251W	5	11	24	0
26	YMR251W-	0	0	0	1624.99
27	YMR252C	1	4	5	#N/A
28	YMR253C	2	4	18	1073.53
29	YMR254C	1	4	3	#N/A
30	YMR255W	0	5	5	1672.65
31	YMR256C	0	1	3	389.985
32	YMR257C	14	20	43	352.12
33	YMR258C	10	15	23	2555.14
34	YMR259C	31	28	52	14121.8
35	YMR260C	2	2	9	16692.1
36	YMR261C	13	29	43	13274.6
37	YMR262W	9	11	15	1381.26
38	YMR263W	2	8	14	1478.61
39	YMR264W	1	5	14	2067.27
40	YMR265C	10	16	36	1196.31
41	YMR266W	6	14	27	15482.3
42	YMR267W	4	8	11	2442.74
43	YMR268C	8	10	29	2509.7
44	YMR269W	0	6	13	2190.48
45	YMR270C	2	10	18	1886.09
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5	YMR275C	12	32	47	8499.59
6	YMR276W	0	5	13	4524.1
7	YMR277W	9	16	25	3599.81
8	YMR278W	6	19	21	7297.42
9	YMR279C	6	7	11	#N/A
10	YMR280C	16	26	63	1064.69
11	YMR281W	2	10	13	645.797
12	YMR282C	11	15	40	3222.7
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14	YMR284W	4	9	29	1248.03
15	YMR285C	10	19	26	4323.05
16	YMR286W	0	2	5	855.733
17	YMR287C	13	22	47	2150.08
18	YMR288W	12	26	52	5616.86
19	YMR289W	8	5	22	1956.18
20	YMR290C	5	8	28	20184.3
21	YMR290W-	3	1	2	#N/A
22	YMR291W	14	17	22	3420.53
23	YMR292W	0	1	6	125.463
24	YMR293C	6	7	19	1347.88
25	YMR294W	2	2	25	3088.16
26	YMR294W-	0	8	11	#N/A
27	YMR295C	1	5	12	3813.72
28	YMR296C	12	12	14	5335.2
29	YMR297W	12	11	11	3838.33
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31	YMR299C	7	8	14	898.205
32	YMR300C	14	10	31	14658.2
33	YMR301C	4	11	40	5351.92
34	YMR302C	4	14	47	6089.83
35	YMR303C	8	11	8	38617.6
36	YMR304C-/	4	3	0	#N/A
37	YMR304W	7	29	52	6677.64
38	YMR305C	5	4	5	3979.3
39	YMR306C-/	4	0	5	#N/A
40	YMR306W	26	38	82	#N/A
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44	YMR309C	4	9	37	24942.3
45	YMR310C	4	4	15	2413.59
46	YMR311C	1	6	10	4910.14
47	YMR312W	4	10	6	1697.28
48	YMR313C	12	12	30	2362.97
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6	YMR316C	1	0	3	#N/A
7	YMR316W	4	9	20	1440.09
8	YMR317W	4	6	14	#N/A
9	YMR318C	10	11	11	16208
10	YMR319C	9	10	30	178.172
11	YMR320W	6	4	7	#N/A
12	YMR321C	3	1	2	#N/A
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14	YMR323W	7	10	17	381.564
15	YMR324C	8	0	3	#N/A
16	YMR325W	0	2	5	#N/A
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18	YNL001W	5	6	2	7720.1
19	YNL002C	2	4	25	10242.2
20	YNL003C	4	3	14	745.552
21	YNL004W	4	11	60	5700.11
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23	YNL006W	7	16	18	1195.44
24	YNL007C	0	5	12	16666.7
25	YNL008C	15	16	29	811.124
26	YNL009W	2	7	19	1944.85
27	YNL010W	4	5	7	13526.2
28	YNL011C	6	19	15	1807.03
29	YNL012W	11	9	18	#N/A
30	YNL013C	4	4	9	#N/A
31	YNL014W	15	23	43	1366.46
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33	YNL016W	3	8	17	7434.37
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35	YNL018C	14	18	28	#N/A
36	YNL019C	5	6	8	224.363
37	YNL020C	6	16	23	1697.88
38	YNL021W	14	20	32	4762.71
39	YNL022C	12	13	24	6378.66
40	YNL023C	92	32	48	5039.87
41	YNL024C	6	7	8	313.84
42	YNL024C-A	3	2	4	1486.71
43	YNL025C	7	13	14	519.439
44	YNL026W	6	19	17	4945.41
45	YNL027W	7	15	34	3592.51
46	YNL028W	5	7	8	#N/A
47	YNL029C	13	17	27	1485.4
48	YNL030W	0	2	14	#N/A
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4	YNL033W	5	6	8	#N/A
5	YNL034W	13	20	27	#N/A
6	YNL035C	9	15	13	6868.03
7	YNL036W	9	10	5	763.739
8	YNL037C	0	10	18	3086.92
9	YNL038W	2	2	18	151.128
10	YNL039W	3	11	38	6846.3
11	YNL040W	9	10	17	3116.86
12	YNL041C	5	10	30	8323.5
13	YNL042W	1	13	20	448.992
14	YNL042W-I	3	2	6	#N/A
15	YNL043C	2	1	2	#N/A
16	YNL044W	2	1	3	4333.45
17	YNL045W	6	21	29	7520.93
18	YNL046W	2	4	11	#N/A
19	YNL047C	4	15	28	2239.52
20	YNL048W	7	9	16	9725.87
21	YNL049C	13	14	45	8877.35
22	YNL050C	1	4	15	717.553
23	YNL051W	2	4	12	3719.47
24	YNL052W	0	1	9	1684.16
25	YNL053W	4	14	20	736.281
26	YNL054W	4	38	36	2973.37
27	YNL054W-J	3	14	15	#N/A
28	YNL054W-I	14	61	73	381.251
29	YNL055C	2	3	5	9440.54
30	YNL056W	2	7	8	1344.46
31	YNL057W	0	0	3	#N/A
32	YNL058C	0	7	15	548.163
33	YNL059C	3	16	40	7572.17
34	YNL061W	7	10	33	17894.7
35	YNL062C	4	13	16	4378.35
36	YNL063W	8	10	22	387.616
37	YNL064C	11	7	19	31658.8
38	YNL065W	15	7	25	509.644
39	YNL066W	11	3	4	2240.76
40	YNL067W	1	5	11	5823.18
41	YNL067W-J	1	3	4	#N/A
42	YNL067W-I	2	1	2	#N/A
43	YNL068C	2	16	31	4552.28
44	YNL069C	0	4	17	20103
45	YNL070W	0	3	2	#N/A
46	YNL071W	3	3	18	16915.2
47	YNL072W	3	2	16	2726
48	YNL073W	9	9	30	3004.25
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2	YNL074C	5	9	22	1492.3
3	YNL075W	2	9	27	9814.2
4	YNL076W	2	14	32	3550.94
5	YNL077W	18	12	21	1418.54
6	YNL078W	2	12	29	831.776
7	YNL079C	0	3	6	5395.84
8	YNL080C	5	9	17	921.966
9	YNL081C	2	7	9	234.319
10	YNL082W	14	19	40	1895.33
11	YNL083W	18	8	25	212.902
12	YNL084C	4	3	13	7582.83
13	YNL085W	5	13	27	14722.5
14	YNL086W	0	1	9	472.31
15	YNL087W	8	12	38	20396.4
16	YNL088W	9	23	60	32082.8
17	YNL089C	3	3	4	#N/A
18	YNL090W	6	2	10	1576.71
19	YNL091W	7	38	60	10436.2
20	YNL092W	11	9	17	234.989
21	YNL093W	4	4	11	1107.42
22	YNL094W	5	9	33	912.7
23	YNL095C	11	7	27	1748.85
24	YNL096C	0	3	13	42447.1
25	YNL097C	8	13	21	2201.89
26	YNL097C-B	0	1	0	#N/A
27	YNL097W-/	6	3	8	#N/A
28	YNL098C	2	2	13	11534
29	YNL099C	5	5	14	623.453
30	YNL100W	2	6	13	1264.67
31	YNL101W	4	15	34	678.03
32	YNL102W	29	22	86	16712.9
33	YNL103W	0	27	22	2087.88
34	YNL103W-/	2	1	0	#N/A
35	YNL104C	9	12	33	11862.9
36	YNL105W	5	3	5	#N/A
37	YNL106C	14	25	63	6212.3
38	YNL107W	1	6	8	2437.17
39	YNL108C	3	6	12	3734.64
40	YNL109W	1	4	2	#N/A
41	YNL110C	0	6	8	8571.75
42	YNL111C	0	3	2	3707.95
43	YNL112W	5	8	48	41688.5
44	YNL113W	2	3	3	2198.04
45	YNL114C	6	4	7	#N/A
46	YNL115C	3	18	33	2242.13
47	YNL116W	11	16	30	2347.97
48	YNL117W	6	14	26	1062.94
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2	YNL118C	4	15	31	16101.9
3	YNL119W	11	8	12	5180.5
4	YNL120C	8	3	5	#N/A
5	YNL121C	3	3	20	22611.1
6	YNL122C	0	7	11	663.405
7	YNL123W	15	24	50	20731.5
8	YNL124W	1	9	18	3180.28
9	YNL125C	12	10	21	1318.66
10	YNL126W	4	18	37	2586.64
11	YNL127W	13	24	45	4768.52
12	YNL128W	8	9	23	#N/A
13	YNL129W	3	5	7	4373.87
14	YNL130C	8	11	8	701.037
15	YNL130C-A	3	0	4	#N/A
16	YNL131W	0	0	4	5365.58
17	YNL132W	6	23	54	25908.6
18	YNL133C	0	0	11	1092.14
19	YNL134C	4	8	9	11029.4
20	YNL135C	1	1	4	10779.6
21	YNL136W	1	9	24	2468.39
22	YNL137C	3	10	26	6294.34
23	YNL138W	4	5	13	14679
24	YNL138W-/	0	2	9	303.935
25	YNL139C	15	32	80	14709.8
26	YNL140C	0	9	14	#N/A
27	YNL141W	7	13	12	12897.5
28	YNL142W	12	10	13	#N/A
29	YNL143C	0	1	9	#N/A
30	YNL144C	14	24	48	#N/A
31	YNL144W-/	1	2	0	#N/A
32	YNL145W	1	0	0	#N/A
33	YNL146C-A	4	1	6	#N/A
34	YNL146W	0	3	5	73.298
35	YNL147W	0	2	5	1301.98
36	YNL148C	2	5	18	904.093
37	YNL149C	0	1	11	2730.51
38	YNL150W	4	2	4	#N/A
39	YNL151C	0	2	6	1848.97
40	YNL152W	5	10	28	1836.04
41	YNL153C	0	0	7	827.579
42	YNL154C	3	19	26	7474.51
43	YNL155W	8	8	15	4940.32
44	YNL156C	7	10	14	1253.46
45	YNL157W	1	2	5	1757.43
46	YNL158W	1	7	8	1860.27
47	YNL159C	1	5	21	1791.85
48	YNL160W	2	2	5	2166.32
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2	YNL161W	4	22	40	6008
3	YNL162W	5	4	8	#N/A
4	YNL162W-/	5	0	4	251.546
5	YNL163C	17	21	54	16131.1
6	YNL164C	4	13	21	903.201
7	YNL165W	4	12	29	448.275
8	YNL166C	3	9	16	8005.5
9	YNL167C	3	14	26	2363.38
10	YNL168C	4	8	11	3319.4
11	YNL169C	5	12	29	5165.11
12	YNL170W	3	3	3	#N/A
13	YNL171C	4	6	3	#N/A
14	YNL172W	20	32	72	4475.73
15	YNL173C	0	2	7	3220.89
16	YNL174W	4	0	6	#N/A
17	YNL175C	4	3	26	27824.6
18	YNL176C	2	5	19	58.019
19	YNL177C	3	7	23	1791.66
20	YNL178W	1	2	20	60669
21	YNL179C	5	7	10	#N/A
22	YNL180C	6	7	11	4564.84
23	YNL181W	5	2	23	4266.49
24	YNL182C	10	12	15	16415.4
25	YNL183C	12	24	35	3073.02
26	YNL184C	2	4	12	#N/A
27	YNL185C	1	3	4	3163.93
28	YNL186W	8	16	25	9744.09
29	YNL187W	10	7	26	#N/A
30	YNL188W	2	6	26	968.882
31	YNL189W	8	2	27	12697.7
32	YNL190W	0	14	1	#N/A
33	YNL191W	6	11	22	1775.45
34	YNL192W	16	22	52	5355.29
35	YNL193W	6	10	18	2182.95
36	YNL194C	6	5	18	373.127
37	YNL195C	4	11	12	180.377
38	YNL196C	4	2	14	#N/A
39	YNL197C	4	17	24	2861.14
40	YNL198C	3	3	9	#N/A
41	YNL199C	1	4	27	1287.97
42	YNL200C	5	5	9	488.197
43	YNL201C	12	23	31	6074.41
44	YNL202W	5	4	9	882.186
45	YNL203C	4	3	8	#N/A
46	YNL204C	9	3	21	34.013
47	YNL205C	6	5	10	#N/A
48	YNL206C	3	4	13	3718.96
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2	YNL207W	5	11	26	9793.5
3	YNL208W	0	5	7	4429.73
4	YNL209W	2	5	29	4258.8
5	YNL210W	5	6	11	#N/A
6	YNL211C	0	1	11	392.504
7	YNL212W	7	7	30	13808.8
8	YNL213C	3	2	20	1058.63
9	YNL214W	0	1	14	1061.15
10	YNL215W	1	3	25	6156.94
11	YNL216W	4	19	45	11317.2
12	YNL217W	6	10	12	590.501
13	YNL218W	9	13	35	2796.52
14	YNL219C	11	11	20	3213.58
15	YNL220W	3	9	20	12893
16	YNL221C	17	23	65	6489.06
17	YNL222W	7	4	9	1288.2
18	YNL223W	12	11	20	698.836
19	YNL224C	3	19	44	5726.15
20	YNL225C	7	13	28	4637.29
21	YNL226W	2	7	5	#N/A
22	YNL227C	6	10	24	2269.59
23	YNL228W	9	4	9	#N/A
24	YNL229C	0	11	19	4189.47
25	YNL230C	3	16	26	604.02
26	YNL231C	2	11	17	11247.4
27	YNL232W	5	1	18	4371.5
28	YNL233W	3	16	45	5430.25
29	YNL234W	4	12	15	2278.49
30	YNL235C	4	8	4	#N/A
31	YNL236W	14	20	33	8989.08
32	YNL237W	14	13	20	76.671
33	YNL238W	8	22	32	2475.97
34	YNL239W	3	7	19	3836.13
35	YNL240C	13	9	24	2643.15
36	YNL241C	1	10	25	19769.6
37	YNL242W	15	31	49	4164.7
38	YNL243W	9	23	41	11648.8
39	YNL244C	2	2	5	7251.47
40	YNL245C	0	0	8	1528.72
41	YNL246W	2	5	10	4176.99
42	YNL247W	6	16	24	28768.5
43	YNL248C	1	3	24	17931.8
44	YNL249C	11	14	20	2655.29
45	YNL250W	9	22	59	10411.3
46	YNL251C	5	15	30	8441.94
47	YNL252C	0	5	13	2821.87
48	YNL253W	10	12	12	2605.84
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2	YNL254C	5	7	21	1214.84
3	YNL255C	21	7	8	11141
4	YNL256W	12	21	35	6606.55
5	YNL257C	18	16	52	7121.1
6	YNL258C	7	14	26	6340.54
7	YNL259C	2	1	1	906.36
8	YNL260C	1	4	11	1277.29
9	YNL261W	7	8	19	2925.6
10	YNL262W	33	40	97	21042
11	YNL263C	3	2	9	2390.01
12	YNL264C	4	8	18	7262.21
13	YNL265C	4	6	12	3567.79
14	YNL266W	4	1	2	#N/A
15	YNL267W	8	22	53	7036.16
16	YNL268W	6	9	21	2921.96
17	YNL269W	4	4	10	#N/A
18	YNL270C	7	3	24	764.419
19	YNL271C	10	38	84	18717.7
20	YNL272C	9	11	29	5066.55
21	YNL273W	7	19	59	6158.97
22	YNL274C	4	11	18	2156.77
23	YNL275W	10	11	23	540.367
24	YNL276C	7	0	4	#N/A
25	YNL277W	7	9	21	676.423
26	YNL277W-1	1	3	2	#N/A
27	YNL278W	9	26	53	5379.91
28	YNL279W	12	11	16	#N/A
29	YNL280C	7	9	18	1933.25
30	YNL281W	1	3	2	6719.9
31	YNL282W	4	4	7	1486.99
32	YNL283C	9	9	13	779.938
33	YNL284C	0	6	22	3956.69
34	YNL284C-A	4	15	18	#N/A
35	YNL284C-B	16	63	77	116.024
36	YNL285W	5	2	7	#N/A
37	YNL286W	5	2	10	3302.69
38	YNL287W	11	14	35	20390.3
39	YNL288W	7	7	19	1863.98
40	YNL289W	5	6	22	#N/A
41	YNL290W	5	5	21	7460.15
42	YNL291C	15	7	12	771.439
43	YNL292W	2	8	15	8011.63
44	YNL293W	8	19	35	1140.39
45	YNL294C	8	13	33	50.302
46	YNL295W	4	20	39	632.567
47	YNL296W	6	1	6	#N/A
48	YNL297C	33	22	61	11393.3
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2	YNL298W	10	26	35	7722.18
3	YNL299W	7	14	46	2942.83
4	YNL300W	0	1	0	#N/A
5	YNL301C	1	5	22	23512.3
6	YNL302C	0	2	12	36182.2
7	YNL303W	4	1	3	#N/A
8	YNL304W	7	12	22	1169.68
9	YNL305C	7	4	9	218.42
10	YNL306W	2	3	12	3504.84
11	YNL307C	6	10	21	12212.8
12	YNL308C	0	8	31	13686.8
13	YNL309W	0	14	20	2408.59
14	YNL310C	6	11	9	2102.46
15	YNL311C	15	16	41	1042.26
16	YNL312W	6	7	6	5677.03
17	YNL313C	18	11	36	14701.8
18	YNL314W	2	9	16	357.809
19	YNL315C	2	9	15	2105.09
20	YNL316C	8	11	17	1383.76
21	YNL317W	7	16	22	2512.68
22	YNL318C	10	7	14	#N/A
23	YNL319W	3	0	2	#N/A
24	YNL320W	6	8	12	1942.48
25	YNL321W	16	37	30	2873.89
26	YNL322C	0	4	7	#N/A
27	YNL323W	7	7	18	2399.92
28	YNL324W	4	0	10	#N/A
29	YNL325C	11	24	40	1937
30	YNL326C	15	12	22	525.945
31	YNL327W	5	12	12	491.072
32	YNL328C	0	3	11	275.254
33	YNL329C	21	15	44	2887.74
34	YNL330C	10	14	21	4048.5
35	YNL331C	2	8	17	#N/A
36	YNL332W	10	5	12	#N/A
37	YNL333W	5	6	11	#N/A
38	YNL334C	5	7	9	#N/A
39	YNL335W	3	6	13	#N/A
40	YNL336W	10	3	14	143.924
41	YNL337W	2	7	1	#N/A
42	YNL338W	1	10	1	#N/A
43	YNL339C	39	34	120	#N/A
44	YNL339W-/-	0	0	6	#N/A
45	YNL339W-I	4	6	9	#N/A
46	YNR001C	1	13	21	6064.19
47	YNR001W-/-	1	2	3	#N/A
48	YNR002C	4	3	7	67.787
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2	YNR003C	3	5	7	5626.64
3	YNR003W-	1	0	1	#N/A
4	YNR004W	2	2	7	542.386
5	YNR005C	2	2	4	#N/A
6	YNR006W	10	12	33	4036.44
7	YNR007C	4	6	14	928.959
8	YNR008W	5	22	37	5837.63
9	YNR009W	4	8	14	451.25
10	YNR010W	1	5	8	2356.83
11	YNR011C	13	14	50	3972.08
12	YNR012W	8	12	24	3789.21
13	YNR013C	10	20	25	5476.16
14	YNR014W	7	10	14	#N/A
15	YNR015W	10	11	19	3674.57
16	YNR016C	12	53	122	96641.1
17	YNR017W	3	4	5	2761.14
18	YNR018W	1	4	13	2706.06
19	YNR019W	8	14	22	4195.67
20	YNR020C	10	11	23	677.046
21	YNR021W	3	7	20	11249.1
22	YNR022C	2	7	6	2443.66
23	YNR023W	2	13	21	3150.48
24	YNR024W	0	1	9	2700.58
25	YNR025C	2	2	3	#N/A
26	YNR026C	3	11	10	4205.65
27	YNR027W	6	6	11	1295.35
28	YNR028W	2	9	14	1756.99
29	YNR029C	7	8	18	4362.59
30	YNR030W	4	11	13	3359.96
31	YNR031C	15	26	71	7730.27
32	YNR032C-A	1	2	2	912.907
33	YNR032W	9	11	19	911.542
34	YNR033W	16	17	23	4113.04
35	YNR034W	3	8	15	3116.06
36	YNR034W-	0	2	4	858.207
37	YNR035C	3	9	20	6788.27
38	YNR036C	4	3	16	721.989
39	YNR037C	0	2	7	2109.9
40	YNR038W	5	11	22	8300.02
41	YNR039C	4	12	20	1881.19
42	YNR040W	3	4	15	2303.93
43	YNR041C	6	1	21	900.796
44	YNR042W	2	2	3	#N/A
45	YNR043W	5	7	16	12364.6
46	YNR044W	11	9	2	#N/A
47	YNR045W	5	9	32	1208.88
48	YNR046W	5	3	2	1942.35
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2	YNR047W	8	32	50	4225.83
3	YNR048W	5	6	14	1070.23
4	YNR049C	0	7	14	1754.05
5	YNR050C	4	5	15	13943
6	YNR051C	3	9	21	15417.8
7	YNR052C	1	8	12	2098.39
8	YNR053C	5	10	34	16101.5
9	YNR054C	1	5	17	7167.74
10	YNR055C	12	6	20	624.284
11	YNR056C	19	10	15	#N/A
12	YNR057C	3	8	4	442.782
13	YNR058W	12	18	10	#N/A
14	YNR059W	9	13	30	150.158
15	YNR060W	12	22	33	#N/A
16	YNR061C	3	2	9	#N/A
17	YNR062C	6	2	9	#N/A
18	YNR063W	17	10	29	#N/A
19	YNR064C	2	6	10	267.649
20	YNR065C	29	21	46	#N/A
21	YNR066C	10	14	13	230.399
22	YNR067C	2	14	16	4412.96
23	YNR068C	5	7	16	#N/A
24	YNR069C	8	11	23	#N/A
25	YNR070W	23	27	49	#N/A
26	YNR071C	5	8	10	#N/A
27	YNR072W	14	6	19	#N/A
28	YNR073C	7	13	20	#N/A
29	YNR074C	3	5	15	3764.21
30	YNR075C-A	2	0	2	#N/A
31	YNR075W	10	4	19	#N/A
32	YNR076W	0	2	4	#N/A
33	YNR077C	2	8	0	#N/A
34	YOL001W	5	9	16	559.664
35	YOL002C	9	11	12	3972.88
36	YOL003C	11	12	20	609.118
37	YOL004W	9	47	57	16438.9
38	YOL005C	1	2	5	5511.76
39	YOL006C	7	12	39	19204.8
40	YOL007C	1	7	9	518.901
41	YOL008W	3	6	14	1140.76
42	YOL009C	4	4	9	676.977
43	YOL010W	4	5	16	4846.1
44	YOL011W	9	8	23	1482.17
45	YOL012C	0	4	11	294.162
46	YOL013C	9	14	21	1086.78
47	YOL013W-I	1	2	5	#N/A
48	YOL013W-I	5	3	3	#N/A
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2	YOL014W	5	3	4	#N/A
3	YOL015W	10	16	40	#N/A
4	YOL016C	3	10	20	6176.05
5	YOL017W	15	15	43	1049.04
6	YOL018C	3	10	24	4829.4
7	YOL019W	5	8	23	3388.2
8	YOL019W-	1	1	4	#N/A
9	YOL020W	14	14	19	449.438
10	YOL021C	15	21	68	16444.4
11	YOL022C	9	5	11	15565.1
12	YOL023W	10	15	26	3707.47
13	YOL024W	3	4	8	#N/A
14	YOL025W	6	17	21	1412.93
15	YOL026C	3	2	5	488.775
16	YOL027C	3	6	24	9565.89
17	YOL028C	1	5	16	231.388
18	YOL029C	12	4	6	#N/A
19	YOL030W	8	2	13	2747.46
20	YOL031C	4	11	20	4105.23
21	YOL032W	0	3	7	1501.65
22	YOL033W	11	16	29	1673.15
23	YOL034W	9	22	62	3829.27
24	YOL035C	1	5	3	#N/A
25	YOL036W	5	15	53	1600.08
26	YOL037C	4	0	5	#N/A
27	YOL038C-A	0	0	3	#N/A
28	YOL038W	4	4	16	4871.3
29	YOL039W	0	0	0	10168.1
30	YOL040C	0	4	14	19791.2
31	YOL041C	4	7	27	14570.9
32	YOL042W	5	9	14	933.031
33	YOL043C	12	8	24	408.696
34	YOL044W	8	12	11	834.07
35	YOL045W	11	31	36	6524.16
36	YOL046C	6	1	4	#N/A
37	YOL047C	3	8	11	#N/A
38	YOL048C	4	8	16	651.335
39	YOL049W	3	4	18	9776.52
40	YOL050C	3	1	0	#N/A
41	YOL051W	4	13	34	7858.06
42	YOL052C	8	12	9	8045.95
43	YOL052C-A	0	1	0	#N/A
44	YOL053W	7	16	24	1549.36
45	YOL054W	11	11	29	2223.81
46	YOL055C	14	13	14	3452.68
47	YOL056W	4	6	17	2046.35
48	YOL057W	5	22	19	17276.1
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2	YOL058W	9	3	20	7770.46
3	YOL059W	7	21	21	8319.32
4	YOL060C	6	26	23	3642.87
5	YOL061W	7	11	20	9072.29
6	YOL062C	5	15	25	3698.43
7	YOL063C	24	22	46	1103.41
8	YOL064C	6	11	14	10576.7
9	YOL065C	9	8	17	2495.39
10	YOL066C	13	18	34	4790.92
11	YOL067C	1	1	9	436.52
12	YOL068C	11	14	18	1488.32
13	YOL069W	4	2	13	3122.81
14	YOL070C	0	5	30	8807.4
15	YOL071W	1	2	8	675.043
16	YOL072W	7	15	22	1536.41
17	YOL073C	3	7	13	1005.12
18	YOL075C	27	23	55	217.635
19	YOL076W	14	17	26	13514.1
20	YOL077C	2	9	16	11047.8
21	YOL077W- <i>l</i>	0	3	0	159.092
22	YOL078W	6	33	50	3285.73
23	YOL079W	3	0	5	#N/A
24	YOL080C	1	9	15	6380.87
25	YOL081W	38	101	136	8267.54
26	YOL082W	9	7	13	1835.59
27	YOL083C-A	1	2	4	#N/A
28	YOL083W	7	6	8	794.49
29	YOL084W	13	15	49	642.101
30	YOL085C	7	4	10	#N/A
31	YOL085W- <i>l</i>	3	7	8	#N/A
32	YOL086C	8	10	8	84747.6
33	YOL086W- <i>l</i>	0	1	9	558.609
34	YOL087C	13	32	40	5205.56
35	YOL088C	8	6	15	6394.8
36	YOL089C	17	22	42	2678.43
37	YOL090W	13	27	29	16216.7
38	YOL091W	9	10	20	#N/A
39	YOL092W	5	3	8	1018.83
40	YOL093W	3	6	23	5985.15
41	YOL094C	3	10	16	3487.45
42	YOL095C	9	15	23	961.62
43	YOL096C	9	9	18	1098.2
44	YOL097C	6	9	16	19653.5
45	YOL097W- <i>l</i>	3	3	0	#N/A
46	YOL098C	17	20	35	15771.2
47	YOL099C	6	0	5	#N/A
48	YOL100W	5	19	47	4819.24
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2	YOL101C	5	9	7	#N/A
3	YOL102C	3	12	12	1433.26
4	YOL103W	10	10	20	1283.41
5	YOL103W-/	4	12	14	551.181
6	YOL103W-I	14	58	70	#N/A
7	YOL104C	10	9	15	#N/A
8	YOL105C	9	6	15	306.952
9	YOL106W	3	3	2	#N/A
10	YOL107W	3	4	15	431.09
11	YOL108C	0	2	11	399.724
12	YOL109W	0	0	1	17480.1
13	YOL110W	5	8	18	82.35
14	YOL111C	0	7	3	9133.26
15	YOL112W	7	5	30	1579.81
16	YOL113W	9	17	33	476.417
17	YOL114C	5	2	13	23.526
18	YOL115W	3	18	25	6166.09
19	YOL116W	2	10	19	1618.65
20	YOL117W	9	5	38	811.957
21	YOL118C	3	5	7	#N/A
22	YOL119C	13	5	18	641.553
23	YOL120C	1	5	22	#N/A
24	YOL121C	0	2	12	#N/A
25	YOL122C	15	11	21	1080.65
26	YOL123W	2	6	28	10179
27	YOL124C	3	7	26	5788.91
28	YOL125W	17	12	27	3632.67
29	YOL126C	5	11	14	1777.71
30	YOL127W	0	1	7	32477.3
31	YOL128C	6	12	16	#N/A
32	YOL129W	3	2	6	#N/A
33	YOL130W	11	25	46	4695.63
34	YOL131W	2	2	7	#N/A
35	YOL132W	9	11	12	1.723
36	YOL133W	9	4	6	1184.09
37	YOL134C	2	7	2	#N/A
38	YOL135C	2	4	9	777.189
39	YOL136C	8	12	14	31.545
40	YOL137W	11	10	9	1137.99
41	YOL138C	23	31	49	2915.65
42	YOL139C	0	7	8	11453.2
43	YOL140W	6	12	15	2534.25
44	YOL141W	11	15	27	2978.08
45	YOL142W	7	2	8	2814.46
46	YOL143C	1	6	7	5260.36
47	YOL144W	4	11	26	11584.7
48	YOL145C	7	23	44	11150.8
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2	YOL146W	1	5	4	471.123
3	YOL147C	3	5	14	1188.46
4	YOL148C	2	11	34	2196.33
5	YOL149W	2	4	7	2282.01
6	YOL150C	2	0	5	#N/A
7	YOL151W	4	9	10	8910.04
8	YOL152W	13	16	30	#N/A
9	YOL154W	6	6	7	210.762
10	YOL155C	13	5	3	#N/A
11	YOL155W-/	2	1	3	#N/A
12	YOL156W	10	5	20	#N/A
13	YOL157C	5	14	29	13.16
14	YOL158C	7	7	26	655.619
15	YOL159C	5	3	6	73.522
16	YOL159C-A	4	3	4	161.044
17	YOL160W	6	3	8	#N/A
18	YOL161C	0	2	4	#N/A
19	YOL162W	4	4	11	#N/A
20	YOL163W	2	1	7	#N/A
21	YOL164W	6	16	36	#N/A
22	YOL164W-/	5	6	3	#N/A
23	YOL165C	1	2	6	#N/A
24	YOL166C	1	7	5	#N/A
25	YOL166W-/	2	4	0	#N/A
26	YOR001W	3	17	43	9732.64
27	YOR002W	9	12	17	833.072
28	YOR003W	6	16	12	254.084
29	YOR004W	5	5	19	6918.95
30	YOR005C	19	20	56	319.599
31	YOR006C	9	7	21	683.931
32	YOR007C	1	2	9	28147.8
33	YOR008C	9	7	6	2096.28
34	YOR008C-A	2	2	3	#N/A
35	YOR008W-	0	0	3	#N/A
36	YOR009W	5	1	2	#N/A
37	YOR010C	0	0	1	#N/A
38	YOR011W	26	26	43	#N/A
39	YOR011W-	2	3	3	#N/A
40	YOR012W	4	6	7	#N/A
41	YOR013W	2	7	6	#N/A
42	YOR014W	8	18	29	6954.64
43	YOR015W	3	6	4	#N/A
44	YOR016C	2	3	8	2143.83
45	YOR017W	6	25	57	3749.31
46	YOR018W	5	20	43	2858.39
47	YOR019W	6	15	36	71.886
48	YOR020C	0	0	3	8058.33

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2	YOR020W-	0	1	1	943.446
3	YOR021C	1	2	13	6812.8
4	YOR022C	5	14	31	2814.3
5	YOR023C	5	25	30	2488.32
6					
7	YOR024W	5	1	6	#N/A
8	YOR025W	12	9	29	541.567
9	YOR026W	10	3	12	1997.7
10	YOR027W	3	8	24	32042.3
11	YOR028C	2	7	18	416.521
12					
13	YOR029W	3	3	7	#N/A
14	YOR030W	8	23	30	#N/A
15	YOR032C	5	13	18	#N/A
16	YOR032W-	1	2	5	#N/A
17					
18	YOR033C	16	12	42	204.731
19	YOR034C	13	19	26	1490.41
20	YOR034C-A	4	2	7	#N/A
21	YOR035C	11	10	29	3394.55
22	YOR036W	0	0	18	1514.93
23					
24	YOR037W	3	9	20	581.1
25	YOR038C	13	8	33	3524.17
26	YOR039W	6	7	14	2489.94
27	YOR040W	8	10	16	1671.79
28					
29	YOR041C	2	0	4	#N/A
30	YOR042W	0	10	28	4941.51
31	YOR043W	8	12	22	2145.95
32	YOR044W	3	5	11	#N/A
33	YOR045W	0	0	1	#N/A
34					
35	YOR046C	3	5	21	17255.6
36	YOR047C	3	8	23	593.985
37	YOR048C	10	21	60	13199
38	YOR049C	6	12	13	#N/A
39	YOR050C	4	2	8	#N/A
40					
41	YOR051C	1	11	13	14051.9
42	YOR052C	7	6	7	1392.33
43	YOR053W	0	27	35	#N/A
44	YOR054C	2	11	24	1357.63
45	YOR055W	5	1	4	#N/A
46					
47	YOR056C	6	13	26	11588.9
48	YOR057W	1	7	11	7947.04
49	YOR058C	5	14	52	744.573
50	YOR059C	4	8	16	552.062
51	YOR060C	3	3	18	138.061
52	YOR061W	5	8	15	7595.61
53					
54	YOR062C	3	10	21	#N/A
55	YOR063W	2	17	33	71628.1
56	YOR064C	9	5	12	311.448
57	YOR065W	4	8	16	1209.71
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2	YOR066W	3	12	24	761.08
3	YOR067C	8	10	21	1698.27
4	YOR068C	4	1	2	#N/A
5	YOR069W	2	9	32	9778.24
6	YOR070C	4	20	36	2342.89
7	YOR071C	15	11	15	837.184
8	YOR072W	4	3	7	#N/A
9	YOR072W-	4	5	13	#N/A
10	YOR072W-	0	1	3	#N/A
11	YOR073W	1	12	34	#N/A
12	YOR073W-	1	1	6	#N/A
13	YOR074C	5	7	18	4837.23
14	YOR075W	4	8	15	2194.17
15	YOR076C	8	20	17	3102.49
16	YOR077W	3	8	21	1186.37
17	YOR078W	0	4	14	3374.49
18	YOR079C	4	9	5	476.054
19	YOR080W	19	11	39	867.259
20	YOR081C	7	21	29	1680.78
21	YOR082C	6	3	6	#N/A
22	YOR083W	0	11	26	732.644
23	YOR084W	7	14	25	358.204
24	YOR085W	5	7	7	2969.8
25	YOR086C	7	13	42	13970.8
26	YOR087W	9	8	30	2498.44
27	YOR089C	2	3	9	6441.48
28	YOR090C	3	10	30	2696.15
29	YOR091W	6	5	18	8860.48
30	YOR092W	9	7	26	706.589
31	YOR093C	32	39	65	5605.99
32	YOR094W	1	1	5	3604.83
33	YOR095C	2	5	11	4962.95
34	YOR096W	0	4	13	3718.62
35	YOR097C	3	2	8	1031.64
36	YOR098C	2	9	30	12515.9
37	YOR099W	7	15	17	14971.2
38	YOR100C	3	3	10	210.516
39	YOR101W	3	1	18	7513.9
40	YOR102W	4	2	5	#N/A
41	YOR103C	5	2	4	1544.87
42	YOR104W	9	2	14	1568.21
43	YOR105W	0	3	6	#N/A
44	YOR106W	4	10	13	1151.18
45	YOR107W	7	9	15	359.604
46	YOR108C-A	3	1	7	#N/A
47	YOR108W	8	14	30	11512.3
48	YOR109W	9	21	47	12157.4
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2	YOR110W	4	7	20	3836.73
3	YOR111W	4	2	6	2133.56
4	YOR112W	9	5	28	4801.11
5	YOR113W	8	23	36	2517.5
6	YOR114W	5	6	22	#N/A
7	YOR115C	2	8	12	2189.02
8	YOR116C	24	30	84	24315
9	YOR117W	1	3	24	13068.1
10	YOR118W	6	13	20	5296.84
11	YOR119C	3	14	28	2952.62
12	YOR120W	2	9	10	541.958
13	YOR121C	0	2	9	#N/A
14	YOR122C	1	3	5	4466.02
15	YOR123C	2	8	33	5032.95
16	YOR124C	13	24	55	9558.75
17	YOR125C	3	12	13	1086.74
18	YOR126C	1	5	9	1469.95
19	YOR127W	21	18	48	3032.85
20	YOR128C	9	14	22	9570.99
21	YOR129C	10	18	38	1320.58
22	YOR130C	6	4	8	843.186
23	YOR131C	3	7	10	2791.11
24	YOR132W	1	7	38	4336.56
25	YOR133W	8	16	41	#N/A
26	YOR134W	2	18	22	370.952
27	YOR135C	5	1	0	#N/A
28	YOR136W	3	7	18	4166.31
29	YOR137C	10	22	30	1351.36
30	YOR138C	10	12	24	4289.83
31	YOR139C	5	2	2	#N/A
32	YOR140W	3	22	24	3713.73
33	YOR141C	8	17	32	8726.84
34	YOR142W	3	6	9	5322.19
35	YOR142W-	3	13	14	#N/A
36	YOR142W-	14	61	71	#N/A
37	YOR143C	8	6	12	3262.51
38	YOR144C	8	21	42	2113.85
39	YOR145C	0	6	18	5986.15
40	YOR146W	3	0	3	#N/A
41	YOR147W	6	12	29	646.915
42	YOR148C	0	2	2	1222.46
43	YOR149C	6	16	16	664.234
44	YOR150W	2	7	10	637.412
45	YOR151C	17	33	79	38391.6
46	YOR152C	1	1	7	324.003
47	YOR153W	28	25	68	27157.6
48	YOR154W	9	11	27	519.279
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2	YOR155C	4	10	31	3864.1
3	YOR156C	12	19	23	840.895
4	YOR157C	4	9	8	3469.3
5	YOR158W	0	6	13	2566.85
6	YOR159C	1	0	1	202.981
8	YOR160W	21	13	33	5270.48
9	YOR161C	12	10	21	1324.95
10	YOR161C-C	1	4	3	#N/A
11	YOR161W-	1	0	3	#N/A
12	YOR161W-	1	1	6	#N/A
14	YOR162C	16	12	40	371.73
15	YOR163W	4	6	13	2164.11
16	YOR164C	2	7	9	4142.75
17	YOR165W	5	19	35	12514.9
18	YOR166C	7	13	15	2121.19
20	YOR167C	0	0	10	#N/A
21	YOR168W	8	16	45	42556.1
22	YOR169C	2	7	10	#N/A
23	YOR170W	2	1	1	#N/A
24	YOR171C	12	12	21	8540.52
26	YOR172W	19	14	39	537.677
27	YOR173W	1	16	18	898.528
28	YOR174W	2	3	10	4170.74
29	YOR175C	9	14	33	6594.25
31	YOR176W	3	7	16	7658.6
32	YOR177C	9	12	18	343.124
33	YOR178C	10	18	22	717.964
34	YOR179C	4	3	6	685.345
35	YOR180C	4	7	4	212.96
37	YOR181W	1	11	31	1824.68
38	YOR182C	0	1	7	#N/A
39	YOR183W	3	6	12	#N/A
40	YOR184W	3	12	8	14037.9
42	YOR185C	3	5	8	#N/A
43	YOR186C-A	2	0	3	#N/A
44	YOR186W	4	3	4	#N/A
45	YOR187W	3	14	29	6286.25
46	YOR188W	10	29	53	8760.88
48	YOR189W	0	0	7	3456.7
49	YOR190W	7	13	16	33.045
50	YOR191W	22	30	83	4981.83
51	YOR192C	16	11	15	#N/A
52	YOR192C-A	3	16	15	#N/A
54	YOR192C-B	15	61	75	142.057
55	YOR192C-C	1	3	3	#N/A
56	YOR193W	2	6	20	711.614
57	YOR194C	2	1	7	1326.58

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2	YOR195W	2	15	22	11613.2
3	YOR196C	10	5	33	4052.79
4	YOR197W	3	7	15	4770.95
5	YOR198C	0	6	20	32409.3
6	YOR199W	4	5	8	#N/A
7	YOR200W	3	1	4	#N/A
8	YOR201C	4	14	15	1523.16
9	YOR202W	4	12	10	#N/A
10	YOR203W	3	4	5	#N/A
11	YOR204W	4	8	43	27617.5
12	YOR205C	11	10	26	2430.64
13	YOR206W	5	9	32	18765.4
14	YOR207C	19	28	60	15608.2
15	YOR208W	19	14	23	414.762
16	YOR209C	2	11	14	13529.2
17	YOR210W	4	1	7	6346.03
18	YOR211C	7	18	39	9074.71
19	YOR212W	9	8	16	2716.76
20	YOR213C	2	9	11	1434.18
21	YOR214C	0	5	1	#N/A
22	YOR215C	0	0	7	2803.77
23	YOR216C	0	10	16	14648.7
24	YOR217W	6	15	40	11040.4
25	YOR218C	9	4	9	#N/A
26	YOR219C	0	23	36	4508.45
27	YOR220W	2	4	8	4404.84
28	YOR221C	8	8	14	642.067
29	YOR222W	5	1	14	7749.38
30	YOR223W	4	7	21	604.09
31	YOR224C	2	0	9	2291.56
32	YOR225W	4	2	7	#N/A
33	YOR226C	3	6	6	1245.88
34	YOR227W	9	33	60	4094.27
35	YOR228C	3	10	17	222.798
36	YOR229W	2	12	22	2433.54
37	YOR230W	2	11	15	6816.78
38	YOR231C-A	4	7	3	#N/A
39	YOR231W	7	7	22	2165.55
40	YOR232W	0	4	15	8807.21
41	YOR233W	5	27	59	5616.68
42	YOR234C	0	3	11	24480.6
43	YOR235W	4	6	2	#N/A
44	YOR236W	3	3	11	4631.05
45	YOR237W	3	14	18	658.443
46	YOR238W	4	6	11	1489.94
47	YOR239W	3	9	23	12975.8
48	YOR241W	5	13	24	8468.58
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2	YOR242C	5	4	21	#N/A
3	YOR243C	4	10	44	15501.6
4	YOR244W	7	11	27	1803.23
5	YOR245C	7	7	24	1522.57
6	YOR246C	7	13	14	2705.43
7					
8	YOR247W	1	2	0	#N/A
9	YOR248W	1	4	5	#N/A
10	YOR249C	12	10	25	533.895
11	YOR250C	6	9	18	2325.33
12	YOR251C	4	7	10	5916.72
13					
14	YOR252W	1	5	16	4463
15	YOR253W	3	7	2	1493.33
16	YOR254C	7	13	23	17376.9
17					
18	YOR255W	5	15	24	#N/A
19	YOR256C	1	20	29	1416.97
20	YOR257W	1	3	8	3056.58
21	YOR258W	5	12	9	271.828
22	YOR259C	2	9	31	12018.7
23					
24	YOR260W	11	10	21	6986.68
25	YOR261C	3	8	11	11129.2
26	YOR262W	6	4	9	2654.93
27	YOR263C	4	2	4	#N/A
28	YOR264W	10	6	21	276.147
29					
30	YOR265W	0	1	4	5812.49
31	YOR266W	4	4	18	1458.77
32	YOR267C	19	47	31	7620.99
33	YOR268C	7	4	7	#N/A
34	YOR269W	10	21	22	1092.32
35					
36	YOR270C	7	21	31	15441.4
37	YOR271C	2	8	16	7046.81
38	YOR272W	4	12	23	12144.8
39	YOR273C	5	9	31	1718.85
40					
41	YOR274W	7	11	25	5337.78
42	YOR275C	6	7	25	4728.66
43	YOR276W	1	8	7	3087.73
44	YOR277C	1	1	1	#N/A
45	YOR278W	3	6	14	1370.81
46					
47	YOR279C	0	2	32	1288.63
48	YOR280C	2	7	10	4362.93
49	YOR281C	2	5	16	7214.52
50	YOR282W	2	5	7	#N/A
51	YOR283W	3	11	15	4885.91
52	YOR284W	3	8	10	749.231
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54	YOR285W	1	5	4	4102.79
55	YOR286W	1	4	7	2286.23
56	YOR287C	0	7	24	4620.86
57	YOR288C	4	6	12	2716.14
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2	YOR289W	4	7	11	1145.4
3	YOR290C	8	37	102	8818.5
4	YOR291W	24	29	71	4455.01
5	YOR292C	6	8	14	#N/A
6	YOR293C-A	1	2	4	#N/A
7	YOR293W	0	3	6	#N/A
8	YOR294W	0	0	11	3292.32
9	YOR295W	2	6	12	402.195
10	YOR296W	14	21	59	1998.32
11	YOR297C	2	2	6	594.101
12	YOR298C-A	0	0	15	10542
13	YOR298W	3	12	22	#N/A
14	YOR299W	17	10	33	2212.84
15	YOR300W	5	3	12	#N/A
16	YOR301W	8	13	31	2601.08
17	YOR302W	1	2	0	#N/A
18	YOR303W	8	12	14	13231.4
19	YOR304C-A	0	0	3	#N/A
20	YOR304W	6	24	61	10280.7
21	YOR305W	4	6	11	1339.49
22	YOR306C	14	10	16	#N/A
23	YOR307C	5	13	16	2398.66
24	YOR308C	0	14	31	2661.94
25	YOR309C	1	2	35	#N/A
26	YOR310C	1	6	21	25222
27	YOR311C	2	8	9	1708.56
28	YOR312C	0	7	16	#N/A
29	YOR313C	1	7	19	#N/A
30	YOR314W	4	1	9	#N/A
31	YOR314W-	1	2	2	#N/A
32	YOR315W	4	5	13	#N/A
33	YOR316C	5	25	11	665.498
34	YOR316C-A	0	3	7	#N/A
35	YOR317W	13	16	20	15346.7
36	YOR318C	2	3	6	#N/A
37	YOR319W	1	1	8	1164.44
38	YOR320C	4	9	18	4037.53
39	YOR321W	11	22	31	3770.62
40	YOR322C	8	21	41	2896.79
41	YOR323C	3	9	15	22241.1
42	YOR324C	5	9	43	1464.82
43	YOR325W	11	0	7	#N/A
44	YOR326W	14	29	62	27602.8
45	YOR327C	1	1	8	1980.04
46	YOR328W	29	27	69	836.124
47	YOR329C	2	25	35	2109.84
48	YOR329W-	2	1	4	#N/A
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2	YOR330C	28	19	61	1686.72
3	YOR331C	7	0	6	#N/A
4	YOR332W	0	0	11	20104.1
5	YOR333C	5	5	11	#N/A
6	YOR334W	6	5	21	823.741
7	YOR335C	7	16	35	67490.1
8	YOR335W-	1	3	1	#N/A
9	YOR336W	11	25	56	8384.08
10	YOR337W	14	10	35	1950.8
11	YOR338W	3	12	30	#N/A
12	YOR339C	3	2	3	#N/A
13	YOR340C	2	9	9	8380.8
14	YOR341W	24	37	79	48291.5
15	YOR342C	2	13	17	693.086
16	YOR343C	1	5	10	#N/A
17	YOR343W-	4	19	15	#N/A
18	YOR343W-	16	64	75	#N/A
19	YOR344C	0	3	11	145.212
20	YOR345C	4	0	5	#N/A
21	YOR346W	22	27	47	840.747
22	YOR347C	5	11	29	4311.23
23	YOR348C	16	12	24	232.552
24	YOR349W	21	28	43	2426.23
25	YOR350C	8	17	31	848.787
26	YOR351C	14	16	21	#N/A
27	YOR352W	4	9	15	1789.23
28	YOR353C	9	19	24	3883.04
29	YOR354C	8	13	29	4633.37
30	YOR355W	1	7	15	2820.38
31	YOR356W	9	12	22	7975.43
32	YOR357C	2	7	11	3732.9
33	YOR358W	2	4	16	1057.77
34	YOR359W	1	16	13	2669.74
35	YOR360C	11	25	20	1647.77
36	YOR361C	6	15	38	27254.1
37	YOR362C	3	9	9	8284.89
38	YOR363C	22	11	49	1125.2
39	YOR364W	4	5	12	#N/A
40	YOR365C	10	9	21	#N/A
41	YOR366W	4	0	7	#N/A
42	YOR367W	2	3	8	3027.47
43	YOR368W	7	9	18	1105.12
44	YOR369C	0	2	6	22142.1
45	YOR370C	8	7	18	6614.26
46	YOR371C	20	24	49	3277.04
47	YOR372C	3	6	18	1365.56
48	YOR373W	7	23	23	4202.65
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2	YOR374W	5	8	18	9564.66
3	YOR375C	6	4	19	25262.5
4	YOR376W	4	3	8	#N/A
5	YOR376W-	3	3	1	#N/A
6					
7	YOR377W	14	17	23	3646.7
8	YOR378W	7	8	13	#N/A
9	YOR379C	7	8	12	#N/A
10	YOR380W	13	22	32	514.925
11	YOR381W	15	18	24	#N/A
12					
13	YOR381W-	0	0	5	#N/A
14	YOR382W	0	0	1	59.572
15	YOR383C	0	2	0	#N/A
16	YOR384W	12	24	34	29.971
17	YOR385W	6	9	19	1311.81
18					
19	YOR386W	9	13	29	1705.11
20	YOR387C	6	2	3	#N/A
21	YOR388C	4	9	18	2099.72
22	YOR389W	8	15	32	2527.26
23					
24	YOR390W	11	9	7	286.698
25	YOR391C	1	6	8	301.938
26	YOR392W	9	1	7	#N/A
27	YOR393W	7	10	17	5.058
28	YOR394C-A	1	7	1	#N/A
29					
30	YOR394W	1	3	7	#N/A
31	YOR396C-A	4	6	9	#N/A
32	YOR396W	36	31	120	#N/A
33	YPL001W	2	6	19	5045.13
34	YPL002C	5	4	10	1059.38
35	YPL003W	9	6	20	757.594
36	YPL004C	0	7	17	4985.92
37	YPL005W	10	12	42	1184.18
38	YPL006W	39	12	35	3157.28
39					
40	YPL007C	9	11	18	2440.14
41	YPL008W	15	17	40	1072.02
42	YPL009C	7	15	39	10940.1
43	YPL010W	0	4	6	2997.63
44	YPL011C	2	5	18	2583.69
45	YPL012W	15	19	55	18888.5
46	YPL013C	1	0	12	969.7
47	YPL014W	4	4	23	233.427
48	YPL015C	7	12	11	1659.2
49	YPL016W	8	13	36	6301.45
50	YPL017C	11	10	19	402.28
51	YPL018W	7	7	23	1032.46
52	YPL019C	2	14	44	7177.12
53	YPL020C	5	9	45	4449.07
54	YPL021W	6	2	11	#N/A
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2	YPL022W	10	24	53	2288.64
3	YPL023C	6	17	32	6550.7
4	YPL024W	3	0	10	1630.48
5	YPL025C	6	5	14	#N/A
6	YPL026C	12	16	16	658.105
7	YPL027W	5	7	16	#N/A
9	YPL028W	6	6	11	19756.7
10	YPL029W	8	16	34	1617.9
11	YPL030W	8	21	29	5519.8
12	YPL031C	3	10	13	2886.83
13	YPL032C	3	20	27	7470.48
14	YPL033C	7	8	7	#N/A
16	YPL034W	4	6	7	9.472
17	YPL035C	4	5	4	#N/A
18	YPL036W	9	13	34	1491.58
19	YPL037C	0	4	2	13041.8
20	YPL038W	5	7	13	1070.61
21	YPL038W- <i>Δ</i>	2	2	3	#N/A
22	YPL039W	7	13	21	#N/A
23	YPL040C	14	34	46	3306.94
24	YPL041C	3	4	13	#N/A
25	YPL042C	5	19	34	2617.94
26	YPL043W	6	9	50	20102.1
27	YPL044C	4	1	4	#N/A
28	YPL045W	15	12	30	3311.83
29	YPL046C	0	1	3	151.66
30	YPL047W	3	2	9	470.186
31	YPL048W	2	3	14	21431.9
32	YPL049C	1	12	24	7845.84
33	YPL050C	1	16	16	4385.14
34	YPL051W	2	3	10	2496.56
35	YPL052W	5	6	8	#N/A
36	YPL053C	7	9	17	4230.17
37	YPL054W	8	9	8	66.503
38	YPL055C	2	11	26	2753.28
39	YPL056C	5	2	7	#N/A
40	YPL057C	7	9	16	116.255
41	YPL058C	31	36	70	6421.83
42	YPL059W	2	0	9	1696.6
43	YPL060W	3	8	24	376.485
44	YPL061W	7	4	17	40778.1
45	YPL062W	3	4	11	#N/A
46	YPL063W	1	8	21	14683.5
47	YPL064C	4	2	20	1790.38
48	YPL065W	1	6	7	1583.71
49	YPL066W	6	9	19	635.838
50	YPL067C	0	9	12	1998.56

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2	YPL068C	1	11	15	699.068
3	YPL069C	0	13	12	1654.86
4	YPL070W	5	9	28	3446.51
5	YPL071C	1	5	10	227.573
6	YPL072W	10	10	26	576.307
7	YPL073C	5	1	11	#N/A
8	YPL074W	1	8	54	2666.89
9	YPL075W	7	9	31	3063.77
10	YPL076W	2	1	11	5.509
11	YPL077C	0	4	23	734.537
12	YPL078C	1	2	11	2329.13
13	YPL079W	1	6	14	#N/A
14	YPL080C	1	6	5	#N/A
15	YPL081W	0	4	23	602.76
16	YPL082C	16	43	77	12817.5
17	YPL083C	0	10	22	1798.33
18	YPL084W	9	12	31	13138.1
19	YPL085W	3	48	58	32602.9
20	YPL086C	11	14	42	13045.5
21	YPL087W	4	7	10	208.393
22	YPL088W	4	11	19	216.961
23	YPL089C	1	14	23	2697.26
24	YPL090C	1	2	28	#N/A
25	YPL091W	5	15	18	17780.3
26	YPL092W	10	8	12	400.87
27	YPL093W	7	13	50	33512.5
28	YPL094C	3	5	14	9521.28
29	YPL095C	6	16	21	855.31
30	YPL096C-A	3	1	3	#N/A
31	YPL096W	14	7	19	2988.62
32	YPL097W	7	8	28	2507.5
33	YPL098C	1	1	5	#N/A
34	YPL099C	0	8	14	444.934
35	YPL100W	14	8	24	2012.6
36	YPL101W	0	14	28	4454.21
37	YPL102C	5	2	7	#N/A
38	YPL103C	14	17	26	702.18
39	YPL104W	8	12	34	2781.6
40	YPL105C	3	8	32	6250.33
41	YPL106C	5	12	26	78710.5
42	YPL107W	4	4	22	395.38
43	YPL108W	4	5	12	1780.2
44	YPL109C	9	15	36	1059.53
45	YPL110C	14	37	55	5224.27
46	YPL111W	6	10	8	4424.42
47	YPL112C	4	8	15	3475.34
48	YPL113C	9	9	15	1078.36
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2	YPL114W	4	3	6	#N/A
3	YPL115C	7	25	44	6038.38
4	YPL116W	8	28	36	5955.96
5	YPL117C	7	10	10	6693.63
6	YPL118W	0	6	22	4132.86
7	YPL119C	4	11	44	1118.89
8	YPL119C-A	3	3	3	#N/A
9	YPL120W	6	6	18	3339.03
10	YPL121C	5	4	10	#N/A
11	YPL122C	2	9	17	4884.04
12	YPL123C	12	10	18	1151
13	YPL124W	0	6	27	1423.18
14	YPL125W	14	17	48	4959.9
15	YPL126W	6	24	21	15726.1
16	YPL127C	1	0	4	8568.1
17	YPL128C	6	11	23	3628.55
18	YPL129W	0	5	9	5440.46
19	YPL130W	1	1	4	#N/A
20	YPL131W	1	6	22	30581.8
21	YPL132W	5	4	22	1757.92
22	YPL133C	13	6	29	1091.76
23	YPL134C	2	4	13	1256.54
24	YPL135C-A	2	2	1	#N/A
25	YPL135W	3	4	8	454.255
26	YPL136W	0	0	3	#N/A
27	YPL137C	14	23	49	9791.83
28	YPL138C	18	9	20	3593.19
29	YPL139C	6	10	8	4922.88
30	YPL140C	6	7	23	567.783
31	YPL141C	10	22	53	2225.87
32	YPL142C	0	1	5	#N/A
33	YPL143W	0	3	11	5113.52
34	YPL144W	3	3	9	832.777
35	YPL145C	3	10	14	17264.7
36	YPL146C	1	12	20	10404.6
37	YPL147W	6	14	54	838.693
38	YPL148C	6	7	8	242.213
39	YPL149W	3	5	12	1046.02
40	YPL150W	9	16	56	2675.1
41	YPL151C	5	16	23	2511.92
42	YPL152W	6	18	13	1510.87
43	YPL152W- <i>f</i>	1	4	2	#N/A
44	YPL153C	10	15	35	4813.03
45	YPL154C	4	9	6	5721.31
46	YPL155C	6	12	54	2251.67
47	YPL156C	1	5	10	670.321
48	YPL157W	8	7	18	565.846
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2	YPL158C	4	9	48	79.848
3	YPL159C	0	8	15	482.522
4	YPL160W	13	20	41	79195.9
5	YPL161C	13	5	15	2403.44
6	YPL162C	6	5	8	#N/A
7	YPL163C	2	2	0	#N/A
8	YPL164C	16	15	38	670.749
9	YPL165C	17	12	18	#N/A
10	YPL166W	1	4	7	194.918
11	YPL167C	30	36	77	95.098
12	YPL168W	4	8	22	1674.71
13	YPL169C	1	8	22	8578.33
14	YPL170W	2	3	5	3197.62
15	YPL171C	2	9	23	256.408
16	YPL172C	7	12	24	224.774
17	YPL173W	1	5	17	3574.14
18	YPL174C	8	15	31	354.404
19	YPL175W	7	17	21	1718
20	YPL176C	6	11	28	2330.13
21	YPL177C	3	6	17	106.027
22	YPL178W	4	2	16	3014.92
23	YPL179W	8	11	24	417.113
24	YPL180W	2	34	45	5361.07
25	YPL181W	7	6	41	2228.76
26	YPL182C	4	0	3	#N/A
27	YPL183C	20	25	37	12467.5
28	YPL183W- <i>f</i>	4	2	10	77.679
29	YPL184C	9	10	29	6791.92
30	YPL185W	3	3	7	#N/A
31	YPL186C	0	7	5	344.531
32	YPL187W	0	4	5	5375.18
33	YPL188W	4	13	19	1595.07
34	YPL189C-A	1	3	3	181.975
35	YPL189W	9	12	33	6.509
36	YPL190C	2	18	29	8869.68
37	YPL191C	5	11	16	532.731
38	YPL192C	0	3	5	#N/A
39	YPL193W	1	10	14	911.112
40	YPL194W	12	13	29	2588.02
41	YPL195W	12	7	38	11777.8
42	YPL196W	5	7	13	555.628
43	YPL197C	0	2	5	#N/A
44	YPL198W	0	4	15	1426.2
45	YPL199C	3	9	7	7305.2
46	YPL200W	2	2	4	#N/A
47	YPL201C	5	15	13	31.181
48	YPL202C	7	8	16	498.099
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2	YPL203W	1	13	19	2961.6
3	YPL204W	5	14	32	6224.1
4	YPL205C	3	3	5	#N/A
5	YPL206C	6	10	12	3455.45
6	YPL207W	25	14	30	14371.2
7	YPL208W	7	8	19	5606.72
8	YPL209C	3	10	23	649.562
9	YPL210C	7	11	27	10016.6
10	YPL211W	1	7	9	7837.72
11	YPL212C	5	9	27	18215.1
12	YPL213W	2	7	20	884.614
13	YPL214C	15	7	16	853.305
14	YPL215W	2	6	22	4962.51
15	YPL216W	22	20	51	83.18
16	YPL217C	6	23	75	17226.9
17	YPL218W	1	4	10	11305.9
18	YPL219W	5	11	16	1230.97
19	YPL220W	4	2	9	#N/A
20	YPL221W	15	10	29	3430.05
21	YPL222C-A	2	1	5	#N/A
22	YPL222W	9	12	28	2486.86
23	YPL223C	0	4	12	158.742
24	YPL224C	2	25	15	1614.5
25	YPL225W	1	1	8	9604.46
26	YPL226W	12	20	48	65881.5
27	YPL227C	5	8	20	2328.41
28	YPL228W	2	10	24	5559.08
29	YPL229W	3	3	6	211.11
30	YPL230W	4	15	20	204.259
31	YPL231W	10	30	66	114404
32	YPL232W	1	8	15	3618.68
33	YPL233W	0	6	9	2658.09
34	YPL234C	5	2	3	609.733
35	YPL235W	2	7	23	12172.6
36	YPL236C	10	4	19	1289.46
37	YPL237W	5	2	15	15024.6
38	YPL238C	1	0	1	#N/A
39	YPL239W	2	5	5	2023.34
40	YPL240C	0	4	27	10456.7
41	YPL241C	9	6	11	2388.23
42	YPL242C	20	26	80	1728.94
43	YPL243W	4	11	26	11108.8
44	YPL244C	5	4	6	432.411
45	YPL245W	7	8	31	6440.05
46	YPL246C	3	6	9	2462.72
47	YPL247C	11	11	20	1636.43
48	YPL248C	18	17	36	58.918
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2	YPL249C	2	17	41	6702.86
3	YPL249C-A	0	1	12	4522.78
4	YPL250C	2	2	3	#N/A
5	YPL250W- <i>f</i>	0	2	3	#N/A
6	YPL251W	2	0	9	#N/A
7	YPL252C	6	6	8	1964.41
8	YPL253C	6	16	26	1031.77
9	YPL254W	3	10	21	2288.56
10	YPL255W	2	9	32	1973.49
11	YPL256C	9	12	21	#N/A
12	YPL257W	2	5	8	203.168
13	YPL257W- <i>f</i>	4	13	14	#N/A
14	YPL257W-E	14	59	71	#N/A
15	YPL258C	17	14	18	#N/A
16	YPL259C	5	9	17	4606.44
17	YPL260W	6	16	25	9392.16
18	YPL261C	2	0	4	#N/A
19	YPL262W	8	15	15	9095.96
20	YPL263C	7	13	27	5490.8
21	YPL264C	5	6	12	48.365
22	YPL265W	9	5	22	1838.7
23	YPL266W	3	6	19	11381.6
24	YPL267W	1	4	15	580.99
25	YPL268W	13	25	48	721.912
26	YPL269W	3	12	33	345.473
27	YPL270W	11	12	39	3269.35
28	YPL271W	0	0	3	1459.7
29	YPL272C	9	15	19	#N/A
30	YPL273W	6	5	11	9071.65
31	YPL274W	15	6	21	4626.52
32	YPL275W	2	6	12	#N/A
33	YPL276W	2	4	6	#N/A
34	YPL277C	10	11	29	#N/A
35	YPL278C	4	3	6	#N/A
36	YPL279C	11	9	7	#N/A
37	YPL280W	1	6	8	#N/A
38	YPL281C	7	10	17	#N/A
39	YPL282C	1	3	7	#N/A
40	YPL283C	39	34	120	#N/A
41	YPL283W- <i>f</i>	0	0	6	#N/A
42	YPL283W-E	4	6	9	#N/A
43	YPR001W	7	13	21	1486.16
44	YPR002C-A	1	2	0	#N/A
45	YPR002W	6	14	22	3249.1
46	YPR003C	11	11	34	224.781
47	YPR004C	6	3	9	3653.61
48	YPR005C	6	10	11	252.978
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2	YPR006C	6	13	26	1356.27
3	YPR007C	5	11	33	182.452
4	YPR008W	11	20	36	3300.51
5	YPR009W	11	3	14	13.026
6	YPR010C	18	30	72	31359.1
7	YPR010C-A	1	0	3	493.809
8	YPR011C	5	2	19	359.19
9	YPR012W	1	4	3	#N/A
10	YPR013C	8	9	11	#N/A
11	YPR014C	6	2	6	#N/A
12	YPR015C	10	13	11	#N/A
13	YPR016C	4	4	13	4520.78
14	YPR016W-/	4	2	4	#N/A
15	YPR017C	6	3	6	1267.64
16	YPR018W	5	4	33	5259.29
17	YPR019W	13	17	66	12543.6
18	YPR020W	1	2	3	1329.79
19	YPR021C	8	18	41	3292.71
20	YPR022C	18	30	49	3801.74
21	YPR023C	6	8	18	5966.94
22	YPR024W	8	11	36	11541.1
23	YPR025C	5	7	15	6071.68
24	YPR026W	5	27	44	933.314
25	YPR027C	4	2	5	#N/A
26	YPR028W	0	2	5	4324.12
27	YPR029C	9	15	24	5215.66
28	YPR030W	11	20	65	698.498
29	YPR031W	25	20	32	1367.84
30	YPR032W	8	16	42	9290.68
31	YPR033C	5	6	22	22349.8
32	YPR034W	4	4	15	8653.21
33	YPR035W	7	11	22	15079.6
34	YPR036W	7	11	15	19521.5
35	YPR036W-/	0	1	3	22.677
36	YPR037C	6	7	8	2701.32
37	YPR038W	4	3	5	#N/A
38	YPR039W	5	11	4	#N/A
39	YPR040W	4	8	25	2700.71
40	YPR041W	7	8	16	23352.9
41	YPR042C	12	19	45	4063.24
42	YPR043W	5	1	10	#N/A
43	YPR044C	0	2	3	#N/A
44	YPR045C	8	9	18	1874.74
45	YPR046W	0	7	9	626.654
46	YPR047W	6	14	28	1288.48
47	YPR048W	9	13	36	6601.91
48	YPR049C	6	19	46	3812.57
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2	YPR050C	5	2	4	#N/A
3	YPR051W	4	4	12	2170.89
4	YPR052C	0	0	7	3466.49
5	YPR053C	5	3	12	#N/A
6	YPR054W	10	13	16	#N/A
7	YPR055W	7	24	34	5696.29
8	YPR056W	9	5	14	2148.7
9	YPR057W	2	11	16	1347.75
10	YPR058W	5	7	16	1892.74
11	YPR059C	2	4	2	#N/A
12	YPR060C	2	4	15	14457.5
13	YPR061C	5	10	13	23.785
14	YPR062W	6	3	7	5796.89
15	YPR063C	3	1	2	1870.24
16	YPR064W	12	1	8	#N/A
17	YPR065W	0	16	13	2226.26
18	YPR066W	16	4	7	146.873
19	YPR067W	4	2	10	855.064
20	YPR068C	10	14	21	1058.88
21	YPR069C	4	10	7	11728.8
22	YPR070W	7	10	16	3885.33
23	YPR071W	3	3	15	241.938
24	YPR072W	6	10	25	7475.85
25	YPR073C	4	6	3	5303.11
26	YPR074C	2	17	22	43492.8
27	YPR074W-1	2	2	8	#N/A
28	YPR075C	8	6	14	672.267
29	YPR076W	3	4	2	#N/A
30	YPR077C	6	6	7	#N/A
31	YPR078C	4	7	20	#N/A
32	YPR079W	7	12	21	1297.82
33	YPR080W	7	11	18	#N/A
34	YPR081C	8	13	36	1891.45
35	YPR082C	3	4	10	735.611
36	YPR083W	6	15	26	1005.95
37	YPR084W	4	12	19	1025.32
38	YPR085C	8	10	18	1082.34
39	YPR086W	10	5	16	6085.42
40	YPR087W	4	2	5	#N/A
41	YPR088C	4	5	16	12080.1
42	YPR089W	10	22	30	3895.77
43	YPR091C	2	13	32	13395.8
44	YPR092W	8	1	8	#N/A
45	YPR093C	16	12	20	147.571
46	YPR094W	13	2	8	1156.31
47	YPR095C	16	27	53	3598.75
48	YPR096C	3	3	9	#N/A
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2	YPR097W	7	21	34	9092.6
3	YPR098C	3	3	3	304.271
4	YPR099C	4	3	4	#N/A
5	YPR100W	3	3	15	968.051
6	YPR101W	1	2	15	132.135
7	YPR102C	1	3	16	#N/A
8	YPR103W	5	7	13	3223.81
9	YPR104C	2	19	37	6034.25
10	YPR105C	4	18	32	7495.45
11	YPR106W	6	15	13	#N/A
12	YPR107C	15	7	15	1192.85
13	YPR108W	5	4	16	13725
14	YPR108W-/	4	1	3	#N/A
15	YPR109W	2	2	16	178.131
16	YPR110C	5	5	18	10409.8
17	YPR111W	6	13	45	875.876
18	YPR112C	1	15	54	26936.9
19	YPR113W	5	6	7	3392.07
20	YPR114W	4	8	7	1940.07
21	YPR115W	13	18	47	5308.59
22	YPR116W	4	7	9	726.675
23	YPR117W	18	70	121	215.799
24	YPR118W	4	4	13	9355.51
25	YPR119W	5	13	23	1633.38
26	YPR120C	6	10	25	348.044
27	YPR121W	22	11	21	17.31
28	YPR122W	16	22	45	5102.78
29	YPR123C	1	0	0	#N/A
30	YPR124W	7	8	7	1038.39
31	YPR125W	2	7	27	6595.36
32	YPR126C	2	2	4	#N/A
33	YPR127W	5	9	14	2670.4
34	YPR128C	1	5	11	1961.69
35	YPR129W	1	3	22	6681.41
36	YPR130C	0	3	11	#N/A
37	YPR131C	3	6	12	1155.35
38	YPR132W	2	2	12	#N/A
39	YPR133C	0	4	28	11536.8
40	YPR133W-/	0	2	1	1399.09
41	YPR134W	2	5	14	859.46
42	YPR135W	12	24	31	6763.64
43	YPR136C	7	0	7	#N/A
44	YPR137C-A	4	14	14	#N/A
45	YPR137C-B	14	63	70	#N/A
46	YPR137W	6	8	34	9750.5
47	YPR138C	11	10	13	130.307
48	YPR139C	5	2	11	4157.15
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2	YPR140W	2	6	28	638.032
3	YPR141C	5	21	33	4729.44
4	YPR142C	6	3	6	#N/A
5	YPR143W	0	3	12	4759.16
6	YPR144C	3	15	15	4619.25
7					
8	YPR145C-A	0	2	10	#N/A
9	YPR145W	9	19	30	18908.9
10	YPR146C	3	2	6	#N/A
11	YPR147C	5	15	9	1894.62
12	YPR148C	5	6	10	9730.47
13					
14	YPR149W	5	3	9	1569.39
15	YPR150W	7	3	6	#N/A
16	YPR151C	0	5	16	9.836
17	YPR152C	7	6	26	2778.48
18					
19	YPR153W	2	1	3	271.657
20	YPR154W	1	3	4	2761.65
21	YPR155C	8	14	31	1643.02
22	YPR156C	11	7	21	2129.26
23					
24	YPR157W	7	18	25	#N/A
25	YPR158C-C	4	12	14	#N/A
26	YPR158C-D	15	62	70	#N/A
27	YPR158W	5	5	15	#N/A
28	YPR158W-/	3	13	14	#N/A
29					
30	YPR158W-I	14	63	70	#N/A
31	YPR159C-A	0	0	0	#N/A
32	YPR159W	6	15	26	6217.04
33	YPR160C-A	6	1	4	#N/A
34	YPR160W	5	19	40	5113.66
35					
36	YPR160W-/	0	0	2	#N/A
37	YPR161C	5	23	36	9245.8
38	YPR162C	6	6	29	3945.37
39	YPR163C	0	1	42	33331.3
40					
41	YPR164W	26	27	60	4502.8
42	YPR165W	7	1	10	5399.96
43	YPR166C	2	1	12	543.695
44	YPR167C	2	10	8	28.253
45	YPR168W	0	2	10	1391.9
46					
47	YPR169W	11	13	15	8019.57
48	YPR169W-/	2	2	3	98.298
49	YPR170C	3	3	6	#N/A
50	YPR170W-/	1	2	1	#N/A
51	YPR170W-I	3	3	4	#N/A
52					
53	YPR171W	1	6	38	8716.76
54	YPR172W	2	4	4	3354.58
55	YPR173C	2	3	19	8381.85
56	YPR174C	2	7	17	1168.04
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58	YPR175W	5	13	32	6075.06
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2	YPR176C	9	7	12	2442.18
3	YPR177C	8	0	9	#N/A
4	YPR178W	4	14	26	2873.85
5	YPR179C	8	17	30	3263.83
6	YPR180W	2	2	15	1603.42
7	YPR181C	11	18	30	15045.4
8	YPR182W	1	2	4	819.087
9	YPR183W	3	6	13	8243.67
10	YPR184W	20	41	75	2406.79
11	YPR185W	4	22	35	1297.6
12	YPR186C	20	29	23	828.938
13	YPR187W	0	2	9	1979.72
14	YPR188C	0	2	5	29.352
15	YPR189W	19	27	44	26500.8
16	YPR190C	4	9	34	8320.5
17	YPR191W	1	3	16	4598.67
18	YPR192W	8	9	11	#N/A
19	YPR193C	1	2	6	15.855
20	YPR194C	13	17	19	#N/A
21	YPR195C	4	3	8	#N/A
22	YPR196W	18	11	31	#N/A
23	YPR197C	1	4	11	#N/A
24	YPR198W	11	9	7	33.516
25	YPR199C	8	6	14	#N/A
26	YPR200C	3	4	7	#N/A
27	YPR201W	9	7	17	#N/A
28	YPR202W	5	6	10	#N/A
29	YPR203W	4	3	7	#N/A
30	YPR204C-A	4	6	9	#N/A
31	YPR204W	21	16	61	#N/A
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	ORF	Cys	His	Arg	abundance in glucose	relative abundance in glucose
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2	YGR192C	2	8	11	187872	0.005974181
3	YAL038W	7	7	24	178510	0.005676477
4	YLR249W	15	24	45	163138	0.00518766
5	YBR118W	7	11	18	147725	0.004697538
6	YLR044C	4	12	15	135265	0.00430132
7	YGR254W	1	11	14	126916	0.004035829
8	YDR385W	8	16	41	124399	0.00395579
9	YHR174W	1	10	14	123441	0.003925326
10	YPL231W	10	30	66	114404	0.003637957
11	YAL005C	3	5	26	110976	0.003528949
12	YCR012W	1	8	13	110700	0.003520173
13	YDL229W	3	5	29	109672	0.003487483
14	YKL182W	15	39	73	109291	0.003475367
15	YMR186W	0	4	27	107787	0.003427541
16	YNR016C	12	53	122	96641.1	0.003073111
17	YKL152C	0	4	12	91469.6	0.002908661
18	YBL076C	9	20	46	88630.7	0.002818386
19	YGL008C	9	14	33	85980.8	0.002734122
20	YOL086C	8	10	8	84747.6	0.002694907
21	YER091C	3	12	33	83404.8	0.002652207
22	YJL130C	23	44	103	82549	0.002624993
23	YPL160W	13	20	41	79195.9	0.002518367
24	YPL106C	5	12	26	78710.5	0.002502932
25	YKL060C	5	12	10	75806.5	0.002410587
26	YJL080C	4	19	44	75467	0.002399791
27	YMR229C	12	31	66	73978.9	0.002352471
28	YOR063W	2	17	33	71628.1	0.002277717
29	YLR106C	39	79	195	71161.1	0.002262867
30	YLR340W	0	4	13	67830.8	0.002156966
31	YOR335C	7	16	35	67490.1	0.002146132
32	YDL171C	38	48	102	65960.7	0.002097498
33	YPL226W	12	20	48	65881.5	0.00209498
34	YDR037W	9	16	35	64735	0.002058522
35	YDR050C	2	3	8	62262.3	0.001979892
36	YDL185W	12	20	55	62023.2	0.001972289
37	YGL195W	26	35	110	62005	0.00197171
38	YER043C	11	16	15	60791.4	0.001933118
39	YNL178W	1	2	20	60669	0.001929226
40	YGR094W	13	24	42	59157.1	0.001881149
41	YBR079C	1	18	59	57729.8	0.001835762
42	YGR240C	12	23	49	57455.2	0.00182703
43	YBR189W	0	4	24	57403.6	0.001825389
44	YLR441C	1	6	15	57059.9	0.00181446
45	YGL245W	7	14	36	56410.5	0.001793809
46	YGL173C	6	43	65	56393.5	0.001793269
47	YLL024C	3	5	26	54990.3	0.001748648
48	YGR155W	1	7	15	54155.3	0.001722096
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2	YIL078W	12	19	39	53555.4	0.001703019
3	YMR116C	2	7	10	53534.2	0.001702345
4	YHL033C	1	3	12	53198.7	0.001691677
5	YFL039C	4	10	18	53075	0.001687743
6	YER110C	9	15	31	52692.7	0.001675586
7	YGR264C	10	22	24	52595.1	0.001672483
8	YER165W	3	9	22	51827.1	0.001648061
9	YHR203C	1	10	22	50610.4	0.001609371
10	YBL039C	8	20	21	50296.8	0.001599399
11	YBR031W	1	10	25	48720.3	0.001549267
12	YOR341W	24	37	79	48291.5	0.001535632
13	YBR181C	1	2	28	46824.3	0.001488976
14	YLR355C	3	5	26	46489.9	0.001478342
15	YDR023W	8	9	17	46364.4	0.001474351
16	YGL009C	11	17	33	45734.1	0.001454308
17	YKL081W	2	5	14	45567.4	0.001449007
18	YGL253W	4	5	19	45336.7	0.001441671
19	YBR196C	0	18	10	44452.4	0.001413551
20	YMR012W	4	31	40	44213.7	0.001405961
21	YBL005W-E	17	63	75	44189.1	0.001405178
22	YGL206C	14	30	52	43506	0.001383456
23	YPR074C	2	17	22	43492.8	0.001383037
24	YCL043C	6	11	7	43242.7	0.001375084
25	YBR121C	6	13	36	43084.5	0.001370053
26	YJR016C	10	12	21	42964.9	0.00136625
27	YBR084W	8	26	42	42797.8	0.001360936
28	YOR168W	8	16	45	42556.1	0.00135325
29	YNL096C	0	3	13	42447.1	0.001349784
30	YGL147C	1	5	11	41776	0.001328444
31	YNL112W	5	8	48	41688.5	0.001325661
32	YGR204W	7	22	41	41389.1	0.001316141
33	YDL140C	21	35	83	41332.4	0.001314338
34	YDL126C	4	11	51	41324.2	0.001314077
35	YDR418W	1	2	8	41308.6	0.001313581
36	YGR061C	22	24	52	40935.5	0.001301717
37	YGL103W	0	10	12	40841.5	0.001298727
38	YJL138C	3	4	24	40799.2	0.001297382
39	YPL061W	7	4	17	40778.1	0.001296711
40	YGR162W	4	14	57	40572.4	0.00129017
41	YMR217W	5	17	20	40306.2	0.001281705
42	YDL055C	3	6	10	39847.4	0.001267116
43	YFR031C-A	0	10	26	39350	0.001251299
44	YHR020W	9	13	26	39349.5	0.001251283
45	YKL056C	1	2	2	39057.3	0.001241991
46	YMR303C	8	11	8	38617.6	0.001228009
47	YOR151C	17	33	79	38391.6	0.001220823
48	YMR142C	0	4	26	38275.6	0.001217134
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2	YMR205C	11	19	52	38149.6	0.001213127
3	YLR075W	4	5	22	37958.6	0.001207053
4	YGL076C	0	4	15	37819.4	0.001202627
5	YIL148W	5	2	10	37412.1	0.001189675
6	YDL058W	9	22	60	37191.7	0.001182667
7	YKR095W	8	21	86	37039.6	0.00117783
8	YDR502C	5	6	15	36940.5	0.001174679
9	YAR010C	4	14	14	36912.2	0.001173779
10	YJL034W	1	8	20	36426.2	0.001158324
11	YNL302C	0	2	12	36182.2	0.001150565
12	YBL092W	0	8	11	35747.8	0.001136752
13	YBL027W	0	7	28	35371.5	0.001124786
14	YER070W	14	17	42	35201.6	0.001119383
15	YLR109W	3	3	1	34975.1	0.001112181
16	YLR448W	0	2	10	34231	0.001088519
17	YMR242C	0	7	16	34204.9	0.001087689
18	YDR127W	23	38	53	34064.7	0.001083231
19	YHR019C	9	10	27	33716.7	0.001072164
20	YAL003W	1	3	2	33686.7	0.00107121
21	YDR447C	1	1	17	33523.2	0.001066011
22	YPL093W	7	13	50	33512.5	0.001065671
23	YDL075W	0	3	11	33500.2	0.00106528
24	YPR163C	0	1	42	33331.3	0.001059909
25	YHR027C	8	22	25	33259.6	0.001057629
26	YLR197W	4	8	18	33185.9	0.001055285
27	YEL031W	13	21	44	33096.4	0.001052439
28	YER036C	3	13	31	32856.8	0.00104482
29	YPL085W	3	48	58	32602.9	0.001036746
30	YKL210W	10	16	33	32567.5	0.001035621
31	YOL127W	0	1	7	32477.3	0.001032752
32	YDL040C	8	12	37	32434.8	0.001031401
33	YDR172W	5	13	18	32411.1	0.001030647
34	YOR198C	0	6	20	32409.3	0.00103059
35	YHR179W	0	8	22	32177.5	0.001023219
36	YNL088W	9	23	60	32082.8	0.001020208
37	YOR027W	3	8	24	32042.3	0.00101892
38	YGR116W	7	33	74	31898.3	0.001014341
39	YDR170C	26	34	85	31742.3	0.00100938
40	YNL064C	11	7	19	31658.8	0.001006725
41	YBL004W	19	55	121	31586.9	0.001004438
42	YER074W	0	1	14	31547.2	0.001003176
43	YFL022C	1	12	19	31417.7	0.000999058
44	YEL034W	2	5	4	31384.2	0.000997993
45	YPR010C	18	30	72	31359.1	0.000997195
46	YDR341C	3	14	28	31329.1	0.000996241
47	YDR238C	10	20	37	31322.4	0.000996028
48	YML072C	8	29	41	31202.1	0.000992202
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2	YBR127C	1	7	33	31180	0.000991499
3	YGR285C	1	7	26	31085.6	0.000988498
4	YJL050W	12	24	58	30756.5	0.000978032
5	YPL131W	1	6	22	30581.8	0.000972477
6	YER025W	10	9	26	30379.3	0.000966038
7	YHL015W	0	2	6	30310.3	0.000963844
8	YGL135W	4	2	9	30206.9	0.000960556
9	YDR091C	14	9	33	30166.2	0.000959261
10	YDR450W	1	7	16	30142.7	0.000958514
11	YJL109C	16	23	69	30049.9	0.000955563
12	YGL207W	9	9	51	30039.3	0.000955226
13	YCL030C	11	13	24	29929.7	0.000951741
14	YBR011C	1	6	6	29866.5	0.000949731
15	YBR025C	6	7	19	29863	0.00094962
16	YDR457W	36	72	157	29645.2	0.000942694
17	YLR259C	5	2	28	29579.4	0.000940602
18	YDR150W	30	86	67	29504.4	0.000938217
19	YIL053W	3	6	6	29401.7	0.000934951
20	YGR103W	4	6	26	29320.9	0.000932381
21	YLL021W	5	25	50	29303.6	0.000931831
22	YDL145C	11	30	55	29258.9	0.00093041
23	YGR090W	11	29	39	29102.4	0.000925433
24	YJL014W	11	8	26	29050.2	0.000923773
25	YDR155C	2	4	5	28974.5	0.000921366
26	YLL040C	21	57	128	28939	0.000920237
27	YLR150W	0	1	20	28883.4	0.000918469
28	YNL247W	6	16	24	28768.5	0.000914816
29	YGL105W	3	11	11	28690.8	0.000912345
30	YIL075C	8	12	33	28646.2	0.000910927
31	YGL026C	7	19	28	28610.5	0.000909791
32	YJR070C	3	8	14	28569.8	0.000908497
33	YCR053W	2	6	16	28213.7	0.000897173
34	YOR007C	1	2	9	28147.8	0.000895078
35	YJL177W	0	4	19	27890.8	0.000886905
36	YNL175C	4	3	26	27824.6	0.0008848
37	YHR183W	7	9	21	27623.3	0.000878399
38	YOR204W	4	8	43	27617.5	0.000878215
39	YOR326W	14	29	62	27602.8	0.000877747
40	YJR045C	0	3	30	27600.3	0.000877668
41	YJR105W	3	7	5	27574.1	0.000876835
42	YBR286W	4	16	10	27563.8	0.000876507
43	YLR153C	6	22	31	27488.6	0.000874116
44	YLR060W	9	15	25	27483.3	0.000873947
45	YDL112W	23	31	42	27450.9	0.000872917
46	YLL018C	3	12	36	27446.5	0.000872777
47	YBL047C	3	21	38	27379.3	0.00087064
48	YOR361C	6	15	38	27254.1	0.000866659
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2	YGR124W	9	20	28	27243.7	0.000866328
3	YGR087C	1	12	12	27187.2	0.000864531
4	YOR153W	28	25	68	27157.6	0.00086359
5	YJL076W	2	10	44	27114.1	0.000862207
6	YPR112C	1	15	54	26936.9	0.000856572
7	YJL008C	6	10	22	26850.5	0.000853825
8	YMR230W	0	3	6	26673.1	0.000848184
9	YPR189W	19	27	44	26500.8	0.000842705
10	YER003C	5	11	15	26459.7	0.000841398
11	YDR099W	1	5	12	26405.4	0.000839671
12	YGL123W	1	3	18	26343.6	0.000837706
13	YIL142W	6	8	23	26229.7	0.000834084
14	YNL132W	6	23	54	25908.6	0.000823873
15	YDL195W	7	22	27	25868	0.000822582
16	YBR218C	12	30	65	25842.6	0.000821774
17	YCR088W	1	4	17	25773.5	0.000819577
18	YLR058C	5	16	23	25531.5	0.000811882
19	YAL035W	7	12	44	25475.9	0.000810113
20	YGL148W	5	8	22	25377.4	0.000806981
21	YOR375C	6	4	19	25262.5	0.000803328
22	YOR310C	1	6	21	25222	0.00080204
23	YKR001C	2	13	31	25190.1	0.000801025
24	YEL046C	7	12	16	25142.4	0.000799508
25	YHR099W	37	83	167	25109.8	0.000798472
26	YAL012W	0	14	13	25085.2	0.00079769
27	YDL084W	6	11	25	24964.6	0.000793855
28	YMR309C	4	9	37	24942.3	0.000793145
29	YML010W	3	15	60	24751.3	0.000787072
30	YMR108W	3	16	30	24744.6	0.000786859
31	YGR185C	4	5	10	24579.7	0.000781615
32	YLR354C	2	3	10	24481.3	0.000778486
33	YOR234C	0	3	11	24480.6	0.000778464
34	YDL014W	3	7	35	24464.8	0.000777961
35	YBR048W	2	5	12	24434.8	0.000777007
36	YBR143C	4	4	13	24340.3	0.000774002
37	YOR116C	24	30	84	24315	0.000773198
38	YDL226C	6	7	15	24307.7	0.000772966
39	YHR064C	2	9	16	24295.3	0.000772571
40	YDL083C	0	3	10	24128.1	0.000767255
41	YGL099W	4	11	38	24037.8	0.000764383
42	YGR159C	1	3	24	24008.5	0.000763451
43	YGR032W	32	43	101	23888.5	0.000759635
44	YGR214W	1	5	15	23794.7	0.000756653
45	YHR216W	8	7	23	23528.3	0.000748181
46	YHL001W	1	0	11	23523.9	0.000748041
47	YNL301C	1	5	22	23512.3	0.000747673
48	YIL133C	0	4	16	23492.9	0.000747056
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2	YDR060W	2	17	31	23409.8	0.000744413
3	YML126C	8	8	17	23385.4	0.000743637
4	YPR041W	7	8	16	23352.9	0.000742604
5	YCR093W	13	34	84	23128.6	0.000735471
6	YJL111W	9	7	20	23080.9	0.000733954
7	YBR245C	9	22	61	23073.4	0.000733716
8	YLR335W	1	1	15	23050.6	0.000732991
9	YGR218W	12	20	38	22976.2	0.000730625
10	YBL017C	37	24	54	22921.4	0.000728882
11	YML028W	2	2	6	22890.5	0.0007279
12	YGL137W	6	14	30	22817.7	0.000725585
13	YBL002W	0	2	6	22806.3	0.000725222
14	YNL121C	3	3	20	22611.1	0.000719015
15	YBL024W	14	18	36	22602.9	0.000718754
16	YEL055C	14	15	31	22584.2	0.00071816
17	YGL202W	4	10	16	22551	0.000717104
18	YMR128W	10	25	69	22549.8	0.000717066
19	YJR109C	11	16	41	22463.5	0.000714322
20	YGL234W	6	17	28	22357.6	0.000710954
21	YER155C	16	63	89	22357.4	0.000710948
22	YPR033C	5	6	22	22349.8	0.000710706
23	YOR323C	3	9	15	22241.1	0.000707249
24	YDR135C	20	29	68	22164.2	0.000704804
25	YJR064W	9	9	22	22158.8	0.000704632
26	YOR369C	0	2	6	22142.1	0.000704101
27	YDR212W	8	9	27	22022.9	0.000700311
28	YHR023W	14	31	83	21976.4	0.000698832
29	YIL149C	16	18	80	21834.8	0.000694329
30	YGR034W	0	2	12	21708	0.000690297
31	YDL060W	5	18	44	21687.6	0.000689649
32	YGR054W	9	13	21	21592.7	0.000686631
33	YFL045C	3	4	13	21480.8	0.000683072
34	YLR244C	14	14	15	21472.6	0.000682812
35	YPL048W	2	3	14	21431.9	0.000681517
36	YHR193C	0	1	4	21211.4	0.000674506
37	YJL041W	0	3	3	21148.2	0.000672496
38	YLR029C	1	5	33	21128.5	0.00067187
39	YNL262W	33	40	97	21042	0.000669119
40	YGL049C	5	19	47	20921	0.000665271
41	YKL212W	4	20	30	20909.6	0.000664909
42	YGR180C	2	6	9	20797.3	0.000661338
43	YBR263W	4	14	20	20793.2	0.000661207
44	YNL123W	15	24	50	20731.5	0.000659245
45	YLR410W	11	26	54	20665.8	0.000657156
46	YML008C	4	8	17	20647.8	0.000656584
47	YDR471W	0	6	8	20619.6	0.000655687
48	YLL048C	15	29	76	20550.1	0.000653477
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2	YBL022C	7	19	51	20488.4	0.000651515
3	YBL072C	2	4	22	20439.6	0.000649963
4	YKL104C	16	21	36	20439.6	0.000649963
5	YNL087W	8	12	38	20396.4	0.000648589
6	YDR353W	4	5	10	20395.6	0.000648564
7	YNL287W	11	14	35	20390.3	0.000648395
8	YGR211W	15	8	22	20368.7	0.000647709
9	YLR384C	14	24	66	20348.1	0.000647054
10	YJR139C	0	3	8	20317.1	0.000646068
11	YJR094W-A	5	1	10	20242.6	0.000643699
12	YBR106W	1	3	8	20232	0.000643362
13	YMR290C	5	8	28	20184.3	0.000641845
14	YER151C	6	29	23	20152.6	0.000640837
15	YKL157W	7	15	36	20131.7	0.000640172
16	YGL120C	7	22	48	20115	0.000639641
17	YCL050C	6	8	5	20104.6	0.00063931
18	YOR332W	0	0	11	20104.1	0.000639294
19	YNL069C	0	4	17	20103	0.00063926
20	YPL043W	6	9	50	20102.1	0.000639231
21	YMR031C	2	16	31	20078.2	0.000638471
22	YML070W	5	9	12	20038.8	0.000637218
23	YGL078C	3	11	20	20029.4	0.000636919
24	YFL004W	1	13	42	19959.2	0.000634687
25	YDR158W	9	8	15	19946.4	0.00063428
26	YER105C	21	24	63	19931.1	0.000633793
27	YGR157W	8	18	33	19908.9	0.000633087
28	YFL007W	28	57	92	19869	0.000631819
29	YKL216W	3	3	9	19866.1	0.000631726
30	YKL014C	15	25	64	19835.9	0.000630766
31	YLR398C	12	26	67	19800	0.000629624
32	YOL040C	0	4	14	19791.2	0.000629345
33	YNL241C	1	10	25	19769.6	0.000628658
34	YPL028W	6	6	11	19756.7	0.000628247
35	YDR226W	1	5	9	19746.6	0.000627926
36	YBL099W	1	6	35	19726.9	0.0006273
37	YIL115C	6	19	28	19686.1	0.000626002
38	YOL097C	6	9	16	19653.5	0.000624966
39	YER062C	3	5	7	19649.7	0.000624845
40	YJL190C	1	4	9	19636.6	0.000624428
41	YDL153C	1	8	32	19522.1	0.000620787
42	YPR036W	7	11	15	19521.5	0.000620768
43	YFR009W	5	18	38	19440.6	0.000618196
44	YER090W	6	12	25	19407.4	0.00061714
45	YDR432W	1	11	38	19382.9	0.000616361
46	YDL136W	1	0	11	19300	0.000613725
47	YGR085C	1	3	16	19284.2	0.000613222
48	YHL030W	23	23	72	19238.2	0.00061176
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2	YER049W	6	15	25	19232	0.000611562
3	YIL126W	6	24	87	19230	0.000611499
4	YOL006C	7	12	39	19204.8	0.000610697
5	YER172C	24	44	85	19175.3	0.000609759
6	YER055C	5	2	14	19109.6	0.00060767
7	YDR500C	4	6	11	19085.3	0.000606897
8	YER001W	10	24	36	18930.9	0.000601988
9	YPR145W	9	19	30	18908.9	0.000601288
10	YPL012W	15	19	55	18888.5	0.000600639
11	YJR007W	5	3	14	18845.8	0.000599282
12	YHR068W	7	8	13	18794.7	0.000597657
13	YOR206W	5	9	32	18765.4	0.000596725
14	YBR086C	8	27	17	18746.4	0.000596121
15	YNL271C	10	38	84	18717.7	0.000595208
16	YLR196W	4	13	18	18643.5	0.000592849
17	YBR249C	5	8	17	18616.7	0.000591996
18	YIL109C	14	18	46	18614.8	0.000591936
19	YGL092W	14	12	47	18589.4	0.000591128
20	YKR082W	15	23	27	18529.6	0.000589227
21	YDR346C	3	13	10	18488.5	0.00058792
22	YEL071W	6	14	17	18457.8	0.000586943
23	YHR208W	4	6	17	18454.9	0.000586851
24	YFR016C	4	15	39	18425.8	0.000585926
25	YLR359W	4	12	31	18388.8	0.000584749
26	YMR129W	15	29	47	18364	0.000583961
27	YLR129W	13	24	30	18315.1	0.000582406
28	YGR234W	4	15	10	18295.3	0.000581776
29	YDL019C	6	33	59	18252.3	0.000580409
30	YER073W	6	8	20	18251.4	0.00058038
31	YDL031W	2	12	59	18240.3	0.000580027
32	YPL212C	5	9	27	18215.1	0.000579226
33	YMR079W	4	4	14	18117	0.000576106
34	YDR483W	8	10	13	18054.2	0.000574109
35	YBR080C	5	9	40	17979	0.000571718
36	YNL248C	1	3	24	17931.8	0.000570217
37	YMR307W	14	1	10	17917.9	0.000569775
38	YNL061W	7	10	33	17894.7	0.000569037
39	YAR015W	1	6	12	17876.9	0.000568471
40	YLR342W	33	43	102	17865.6	0.000568112
41	YDL143W	7	8	31	17845.6	0.000567476
42	YBL087C	2	0	10	17831.2	0.000567018
43	YPL091W	5	15	18	17780.3	0.000565399
44	YGL031C	0	2	16	17737.7	0.000564045
45	YLR420W	6	12	6	17643.3	0.000561043
46	YDR120C	11	13	26	17520.9	0.000557151
47	YMR235C	5	10	10	17512.5	0.000556884
48	YOL109W	0	0	1	17480.1	0.000555853
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2	YBR191W	1	6	14	17438.7	0.000554537
3	YOR254C	7	13	23	17376.9	0.000552572
4	YBR015C	7	11	17	17351.5	0.000551764
5	YIR006C	4	11	40	17322.1	0.000550829
6	YER164W	6	31	87	17316.2	0.000550641
7	YOL057W	5	22	19	17276.1	0.000549366
8	YPL145C	3	10	14	17264.7	0.000549004
9	YOR046C	3	5	21	17255.6	0.000548714
10	YPL217C	6	23	75	17226.9	0.000547802
11	YKL215C	14	28	58	17091.2	0.000543487
12	YLR429W	0	12	24	17089.2	0.000543423
13	YIL043C	2	8	10	17058.1	0.000542434
14	YML069W	3	7	30	16998.2	0.000540529
15	YBR248C	9	9	20	16996	0.000540459
16	YGL030W	0	0	3	16985.4	0.000540122
17	YJL033W	5	16	37	16928.9	0.000538326
18	YNL071W	3	3	18	16915.2	0.00053789
19	YBL007C	5	12	49	16829.2	0.000535155
20	YNL102W	29	22	86	16712.9	0.000531457
21	YKL073W	3	14	39	16706.5	0.000531254
22	YKL080W	1	7	12	16699.7	0.000531037
23	YMR260C	2	2	9	16692.1	0.000530796
24	YNL007C	0	5	12	16666.7	0.000529988
25	YBL091C	4	14	21	16657.5	0.000529695
26	YER178W	7	8	22	16598.6	0.000527822
27	YCL057W	4	17	19	16510.4	0.000525018
28	YBR023C	22	23	46	16452.3	0.00052317
29	YOL021C	15	21	68	16444.4	0.000522919
30	YOL004W	9	47	57	16438.9	0.000522744
31	YER006W	2	6	29	16424.3	0.00052228
32	YNL182C	10	12	15	16415.4	0.000521997
33	YGR209C	2	0	1	16339.9	0.000519596
34	YLL045C	1	3	11	16294.9	0.000518165
35	YER086W	5	18	32	16280.1	0.000517694
36	YCR031C	1	2	15	16275.9	0.000517561
37	YJL012C	4	15	42	16271.6	0.000517424
38	YLR430W	31	42	110	16256.5	0.000516944
39	YCR057C	8	18	44	16244.9	0.000516575
40	YKL145W	6	3	33	16222.8	0.000515872
41	YOL090W	13	27	29	16216.7	0.000515678
42	YMR318C	10	11	11	16208	0.000515402
43	YLL008W	1	8	47	16199.1	0.000515119
44	YNL163C	17	21	54	16131.1	0.000512956
45	YDR507C	4	19	75	16126.8	0.00051282
46	YNL118C	4	15	31	16101.9	0.000512028
47	YNR053C	5	10	34	16101.5	0.000512015
48	YDL103C	7	8	16	16016.4	0.000509309
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2	YJL074C	3	16	64	16011.3	0.000509147
3	YDR168W	0	13	9	15994.5	0.000508612
4	YLR216C	7	6	9	15953.1	0.000507296
5	YJR104C	2	6	4	15944.3	0.000507016
6	YDR188W	5	8	27	15905.8	0.000505792
7	YER081W	5	11	13	15899.9	0.000505604
8	YLL026W	6	15	54	15892.5	0.000505369
9	YGR118W	2	2	12	15878.6	0.000504927
10	YLR303W	1	16	12	15875.3	0.000504822
11	YHR052W	1	5	9	15773.2	0.000501575
12	YOL098C	17	20	35	15771.2	0.000501512
13	YMR086W	2	16	53	15769.4	0.000501454
14	YPL126W	6	24	21	15726.1	0.000500078
15	YIL137C	12	30	26	15700.4	0.00049926
16	YJL167W	6	5	11	15694.2	0.000499063
17	YDR381W	0	0	29	15656	0.000497848
18	YHR042W	4	12	21	15613	0.000496481
19	YDL137W	1	2	12	15610.3	0.000496395
20	YOR207C	19	28	60	15608.2	0.000496328
21	YGL027C	8	18	33	15573.1	0.000495212
22	YCR016W	1	3	8	15566.4	0.000494999
23	YOL022C	9	5	11	15565.1	0.000494958
24	YLR309C	3	11	32	15555	0.000494637
25	YOR243C	4	10	44	15501.6	0.000492939
26	YMR266W	6	14	27	15482.3	0.000492325
27	YDR093W	27	23	95	15471	0.000491966
28	YDR293C	6	36	70	15461.6	0.000491667
29	YOR270C	7	21	31	15441.4	0.000491024
30	YCL045C	6	20	20	15434.6	0.000490808
31	YNR051C	3	9	21	15417.8	0.000490274
32	YGR186W	2	7	44	15378.2	0.000489015
33	YOR317W	13	16	20	15346.7	0.000488013
34	YDR190C	3	6	24	15345.1	0.000487962
35	YER023W	7	4	2	15322.5	0.000487243
36	YER122C	4	6	21	15303.2	0.00048663
37	YDR211W	14	13	30	15277.8	0.000485822
38	YLR293C	3	4	8	15262.6	0.000485339
39	YDL148C	3	13	50	15250.6	0.000484957
40	YDR299W	1	7	23	15247.8	0.000484868
41	YER056C-A	4	2	13	15202.6	0.000483431
42	YBR088C	4	2	8	15169.8	0.000482388
43	YLL011W	3	16	38	15116.8	0.000480702
44	YHR128W	5	2	15	15112.7	0.000480572
45	YDR395W	11	14	27	15080.5	0.000479548
46	YPR035W	7	11	22	15079.6	0.000479519
47	YLL034C	9	4	50	15064.9	0.000479052
48	YPR181C	11	18	30	15045.4	0.000478432
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2	YPL237W	5	2	15	15024.6	0.00047777
3	YDR496C	5	17	31	15004.6	0.000477134
4	YOR099W	7	15	17	14971.2	0.000476072
5	YHR158C	5	33	42	14959.6	0.000475703
6	YML073C	0	2	10	14945.1	0.000475242
7	YDR345C	15	3	17	14908.8	0.000474088
8	YAR002W	0	6	21	14854.5	0.000472361
9	YLR304C	7	17	33	14846.3	0.000472101
10	YHR146W	2	3	14	14829.3	0.00047156
11	YML048W	2	6	17	14765.4	0.000469528
12	YNL085W	5	13	27	14722.5	0.000468164
13	YGR270W	8	21	86	14718.4	0.000468033
14	YNL139C	15	32	80	14709.8	0.00046776
15	YNL313C	18	11	36	14701.8	0.000467506
16	YPL063W	1	8	21	14683.5	0.000466924
17	YNL138W	4	5	13	14679	0.000466781
18	YMR300C	14	10	31	14658.2	0.000466119
19	YOR216C	0	10	16	14648.7	0.000465817
20	YBR169C	4	9	33	14629.5	0.000465207
21	YHR072W-	0	2	5	14612.3	0.00046466
22	YOL041C	4	7	27	14570.9	0.000463343
23	YAL016W	7	4	23	14534.9	0.000462198
24	YLR276C	5	13	26	14523.2	0.000461826
25	YGR145W	5	12	55	14522.1	0.000461791
26	YDL102W	20	19	56	14495	0.00046093
27	YDR101C	9	15	23	14492.2	0.000460841
28	YCL054W	6	13	46	14475	0.000460294
29	YPR060C	2	4	15	14457.5	0.000459737
30	YBR142W	5	15	35	14437.2	0.000459092
31	YHR165C	10	58	129	14434.7	0.000459012
32	YDR292C	4	13	19	14411.5	0.000458274
33	YGR086C	0	4	20	14411.1	0.000458262
34	YKL172W	0	11	27	14401.6	0.00045796
35	YDR365C	3	9	30	14380.7	0.000457295
36	YPL207W	25	14	30	14371.2	0.000456993
37	YHR039C-A	0	2	2	14320.5	0.000455381
38	YGR027C	0	3	7	14303.4	0.000454837
39	YDR454C	1	1	7	14277.2	0.000454004
40	YHR197W	9	18	24	14272.8	0.000453864
41	YMR146C	6	12	8	14258.5	0.000453409
42	YMR246W	12	14	23	14243.5	0.000452932
43	YML086C	8	9	20	14222.1	0.000452252
44	YBR112C	5	22	28	14202.7	0.000451635
45	YDR129C	4	12	33	14189.6	0.000451218
46	YER138C	14	59	70	14152.6	0.000450041
47	YDR071C	2	6	6	14130.9	0.000449351
48	YMR259C	31	28	52	14121.8	0.000449062
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2	YFL008W	6	18	60	14095.2	0.000448216
3	YIL038C	4	13	39	14093.5	0.000448162
4	YDR011W	26	28	60	14089.5	0.000448035
5	YJL136C	1	1	7	14084.9	0.000447889
6	YMR015C	12	13	16	14084.1	0.000447863
7	YOR051C	1	11	13	14051.9	0.000446839
8	YOR184W	3	12	8	14037.9	0.000446394
9	YER120W	2	2	3	14028.3	0.000446089
10	YCL014W	17	28	59	14025.2	0.00044599
11	YLR175W	9	8	27	13975.1	0.000444397
12	YOR086C	7	13	42	13970.8	0.00044426
13	YLR192C	0	2	14	13955.7	0.00044378
14	YNR050C	4	5	15	13943	0.000443376
15	YGR123C	9	14	24	13941.7	0.000443335
16	YDR141C	19	26	71	13930.3	0.000442973
17	YER048C	1	6	18	13929.9	0.00044296
18	YLR419W	14	24	71	13892.6	0.000441774
19	YHR007C	4	18	25	13888.6	0.000441647
20	YAL019W	7	22	50	13861.4	0.000440782
21	YER125W	4	17	58	13819.4	0.000439446
22	YNL212W	7	7	30	13808.8	0.000439109
23	YDR324C	13	12	37	13752.1	0.000437306
24	YBL085W	4	26	44	13751.1	0.000437274
25	YML103C	12	27	34	13744.8	0.000437074
26	YJL010C	5	15	38	13729.3	0.000436581
27	YMR109W	9	26	70	13729	0.000436571
28	YPR108W	5	4	16	13725	0.000436444
29	YGR184C	43	51	92	13718.5	0.000436237
30	YFR044C	5	9	11	13709.8	0.000435961
31	YHL034C	1	7	25	13687.4	0.000435249
32	YNL308C	0	8	31	13686.8	0.000435229
33	YCR084C	7	14	27	13681.1	0.000435048
34	YKL035W	4	16	26	13671.7	0.000434749
35	YJL207C	24	36	55	13667.3	0.000434609
36	YMR131C	4	10	16	13646.2	0.000433938
37	YER082C	2	22	28	13638.6	0.000433697
38	YDR165W	7	13	12	13591.3	0.000432193
39	YLR389C	9	29	34	13584.8	0.000431986
40	YMR083W	7	9	11	13580.9	0.000431862
41	YHR196W	6	10	11	13580.4	0.000431846
42	YJL020C	0	37	45	13529.4	0.000430224
43	YOR209C	2	11	14	13529.2	0.000430218
44	YNL010W	4	5	7	13526.2	0.000430122
45	YOL076W	14	17	26	13514.1	0.000429738
46	YGL167C	14	13	35	13472.4	0.000428412
47	YLR180W	5	8	15	13461	0.000428049
48	YKL029C	9	17	45	13460.2	0.000428024
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2	YEL022W	17	24	46	13416.1	0.000426621
3	YEL032W	2	22	67	13412	0.000426491
4	YPR091C	2	13	32	13395.8	0.000425976
5	YML093W	0	11	56	13382.8	0.000425562
6	YJR002W	1	6	27	13350.5	0.000424535
7	YKL179C	1	9	31	13312.4	0.000423324
8	YMR261C	13	29	43	13274.6	0.000422122
9	YOR303W	8	12	14	13231.4	0.000420748
10	YDL061C	4	4	8	13212.4	0.000420144
11	YFR010W	5	7	21	13202.2	0.00041982
12	YOR048C	10	21	60	13199	0.000419718
13	YAL023C	11	21	33	13172.9	0.000418888
14	YBR081C	6	22	46	13166.4	0.000418681
15	YGL201C	12	17	66	13159.8	0.000418471
16	YPL084W	9	12	31	13138.1	0.000417781
17	YOR117W	1	3	24	13068.1	0.000415555
18	YPL086C	11	14	42	13045.5	0.000414837
19	YER052C	10	12	19	13045.4	0.000414833
20	YPL037C	0	4	2	13041.8	0.000414719
21	YKL129C	10	24	57	13037.9	0.000414595
22	YML017W	0	16	30	13035.4	0.000414515
23	YCL037C	0	17	15	12996.8	0.000413288
24	YDR321W	10	7	9	12981	0.000412786
25	YOR239W	3	9	23	12975.8	0.00041262
26	YML085C	11	11	21	12962.7	0.000412204
27	YLR061W	0	1	4	12939.2	0.000411456
28	YLR399C	2	10	38	12920.9	0.000410874
29	YMR076C	8	25	48	12915.2	0.000410693
30	YNL141W	7	13	12	12897.5	0.00041013
31	YBL058W	2	6	25	12894.9	0.000410048
32	YNL220W	3	9	20	12893	0.000409987
33	YDL208W	1	3	4	12885.8	0.000409758
34	YFL037W	6	11	19	12884.5	0.000409717
35	YLR028C	7	12	25	12880.2	0.00040958
36	YKR008W	3	13	15	12866.6	0.000409148
37	YGR173W	5	10	20	12863.8	0.000409059
38	YLR380W	2	18	14	12835.9	0.000408171
39	YPL082C	16	43	77	12817.5	0.000407586
40	YHR141C	5	4	8	12798.3	0.000406976
41	YBR009C	0	2	14	12759.2	0.000405732
42	YLR301W	1	4	9	12738.4	0.000405071
43	YNL189W	8	2	27	12697.7	0.000403777
44	YJL200C	9	16	27	12662.2	0.000402648
45	YER131W	4	3	16	12651.9	0.00040232
46	YDR430C	6	27	39	12649.4	0.000402241
47	YGL171W	9	8	33	12616	0.000401179
48	YMR194W	0	1	12	12612.6	0.000401071
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2	YDL066W	3	8	20	12612.3	0.000401061
3	YJL005W	20	55	102	12591.8	0.000400409
4	YGR128C	11	10	16	12577.5	0.000399955
5	YDR388W	1	5	15	12554.4	0.00039922
6	YBL079W	13	27	53	12551.6	0.000399131
7	YPR019W	13	17	66	12543.6	0.000398877
8	YLR397C	7	14	38	12519.3	0.000398104
9	YOR098C	2	9	30	12515.9	0.000397996
10	YOR165W	5	19	35	12514.9	0.000397964
11	YMR049C	5	19	38	12510.2	0.000397814
12	YPL183C	20	25	37	12467.5	0.000396457
13	YDR399W	2	5	8	12464.2	0.000396352
14	YBR199W	8	11	17	12428.8	0.000395226
15	YBR073W	17	12	48	12425.6	0.000395124
16	YDL029W	3	7	25	12420	0.000394946
17	YMR027W	7	7	24	12415.9	0.000394816
18	YBL032W	2	8	18	12373.5	0.000393468
19	YNR043W	5	7	16	12364.6	0.000393185
20	YGL157W	8	7	3	12303.3	0.000391235
21	YHR077C	5	15	53	12300.8	0.000391156
22	YDR449C	5	8	22	12297.7	0.000391057
23	YDR310C	3	19	56	12246.4	0.000389426
24	YCL059C	4	4	23	12246.1	0.000389416
25	YAL029C	15	26	65	12217.2	0.000388497
26	YNL307C	6	10	21	12212.8	0.000388357
27	YDR002W	3	3	8	12177.9	0.000387248
28	YPL235W	2	7	23	12172.6	0.000387079
29	YBL105C	24	30	56	12158.9	0.000386643
30	YOR109W	9	21	47	12157.4	0.000386596
31	YOR272W	4	12	23	12144.8	0.000386195
32	YDR427W	1	8	14	12140.5	0.000386058
33	YFL034C-A	0	1	4	12134.4	0.000385864
34	YHL007C	7	21	30	12130.1	0.000385728
35	YGR281W	17	19	72	12116.9	0.000385308
36	YLR167W	4	5	8	12105.5	0.000384945
37	YDL160C	7	15	23	12081.3	0.000384176
38	YPR088C	4	5	16	12080.1	0.000384138
39	YHR108W	3	11	19	12075.2	0.000383982
40	YLR401C	14	13	43	12061.5	0.000383546
41	YMR247C	21	19	51	12052	0.000383244
42	YGR245C	8	15	46	12033.2	0.000382646
43	YGR167W	0	2	10	12031.7	0.000382599
44	YOR259C	2	9	31	12018.7	0.000382185
45	YDR390C	11	7	23	11984	0.000381082
46	YDR382W	0	0	1	11979.3	0.000380932
47	YER136W	5	11	16	11938.3	0.000379629
48	YMR080C	19	22	49	11919.8	0.00037904
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2	YDR303C	12	16	34	11911.6	0.000378779
3	YHR117W	4	8	24	11905	0.00037857
4	YDL132W	6	20	33	11903.1	0.000378509
5	YJR072C	6	1	14	11901.4	0.000378455
6	YNL104C	9	12	33	11862.9	0.000377231
7	YAR007C	5	9	33	11861.1	0.000377174
8	YDR097C	14	20	53	11847.6	0.000376744
9	YKL184W	11	12	16	11828.1	0.000376124
10	YGR175C	7	11	24	11819.5	0.000375851
11	YLR287C-A	0	1	7	11808.5	0.000375501
12	YPL195W	12	7	38	11777.8	0.000374525
13	YHR018C	4	13	25	11768.1	0.000374216
14	YLR432W	7	7	21	11765.6	0.000374137
15	YHR047C	4	13	35	11763.3	0.000374064
16	YDL095W	9	25	27	11750.8	0.000373666
17	YPR069C	4	10	7	11728.8	0.000372967
18	YJR123W	1	2	17	11714.6	0.000372515
19	YGL048C	4	8	27	11679.7	0.000371405
20	YLR314C	3	13	17	11660.5	0.000370795
21	YDR064W	0	4	14	11653.5	0.000370572
22	YNL243W	9	23	41	11648.8	0.000370423
23	YAL036C	4	7	20	11634.2	0.000369958
24	YCR009C	3	2	14	11621.3	0.000369548
25	YOR195W	2	15	22	11613.2	0.000369291
26	YIL091C	3	18	47	11603.4	0.000368979
27	YGR135W	0	3	12	11589	0.000368521
28	YOR056C	6	13	26	11588.9	0.000368518
29	YOL144W	4	11	26	11584.7	0.000368384
30	YLR305C	28	44	75	11546.1	0.000367157
31	YPR024W	8	11	36	11541.1	0.000366998
32	YPR133C	0	4	28	11536.8	0.000366861
33	YJL186W	7	17	21	11536.2	0.000366842
34	YNL098C	2	2	13	11534	0.000366772
35	YJR092W	12	35	54	11514	0.000366136
36	YOR108W	8	14	30	11512.3	0.000366082
37	YOL139C	0	7	8	11453.2	0.000364203
38	YCR077C	0	11	37	11451.1	0.000364136
39	YGL238W	2	14	32	11449.8	0.000364095
40	YDR394W	0	4	30	11445	0.000363942
41	YBR034C	3	12	10	11442.9	0.000363875
42	YEL047C	5	9	17	11433.6	0.000363579
43	YNL297C	33	22	61	11393.3	0.000362298
44	YFL018C	5	14	17	11387.1	0.000362101
45	YPL266W	3	6	19	11381.6	0.000361926
46	YGL043W	7	10	11	11379.8	0.000361869
47	YNL216W	4	19	45	11317.2	0.000359878
48	YPL218W	1	4	10	11305.9	0.000359519
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2	YDL100C	7	7	9	11284.9	0.000358851
3	YER068W	12	21	24	11271.2	0.000358415
4	YLR452C	10	23	24	11263.4	0.000358167
5	YBL036C	4	5	10	11261.6	0.00035811
6	YNR021W	3	7	20	11249.1	0.000357712
7	YNL231C	2	11	17	11247.4	0.000357658
8	YML035C	8	31	42	11230.3	0.000357115
9	YJL101C	9	19	34	11225.5	0.000356962
10	YFR030W	2	15	28	11186.4	0.000355719
11	YDR300C	3	11	18	11172.4	0.000355273
12	YGR229C	1	13	14	11161.3	0.000354921
13	YHR190W	8	14	18	11157.7	0.000354806
14	YJL039C	19	24	60	11154.1	0.000354692
15	YOL145C	7	23	44	11150.8	0.000354587
16	YDL131W	8	12	20	11147.1	0.000354469
17	YLR325C	0	0	6	11144.8	0.000354396
18	YLR051C	0	3	17	11141.8	0.0003543
19	YNL255C	21	7	8	11141	0.000354275
20	YKR054C	49	83	177	11129.5	0.000353909
21	YOR261C	3	8	11	11129.2	0.0003539
22	YLR454W	28	61	99	11128.5	0.000353878
23	YJL087C	21	17	35	11123.4	0.000353715
24	YPL243W	4	11	26	11108.8	0.000353251
25	YMR038C	7	5	7	11097.9	0.000352904
26	YJL026W	2	10	15	11089.4	0.000352634
27	YDL007W	4	6	20	11084	0.000352462
28	YDL074C	13	13	37	11052.4	0.000351458
29	YOL077C	2	9	16	11047.8	0.000351311
30	YOR217W	6	15	40	11040.4	0.000351076
31	YNL134C	4	8	9	11029.4	0.000350726
32	YML056C	9	7	15	11015.3	0.000350278
33	YLR027C	4	13	13	11011.5	0.000350157
34	YFL048C	2	2	15	11011.2	0.000350147
35	YBL035C	4	14	27	10994.1	0.000349604
36	YFR031C	9	16	52	10994	0.000349601
37	YGL150C	9	30	82	10950.7	0.000348224
38	YPL009C	7	15	39	10940.1	0.000347887
39	YGL055W	4	21	22	10923.4	0.000347355
40	YIL041W	3	4	12	10919.5	0.000347231
41	YBL061C	4	16	30	10919.2	0.000347222
42	YML125C	1	7	13	10918.2	0.00034719
43	YGR200C	15	22	36	10915.7	0.000347111
44	YFR037C	7	14	21	10900.8	0.000346637
45	YAL026C	13	27	58	10887	0.000346198
46	YKR018C	7	15	31	10866.8	0.000345556
47	YHR065C	5	6	32	10815.8	0.000343934
48	YFR002W	5	15	38	10796.8	0.00034333
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2	YDR233C	4	8	2	10792.3	0.000343187
3	YHR063C	9	7	17	10786.5	0.000343002
4	YML106W	2	2	6	10785.8	0.00034298
5	YNL135C	1	1	4	10779.6	0.000342783
6	YMR226C	1	3	12	10776.6	0.000342687
7	YKL009W	2	2	15	10755.5	0.000342016
8	YDL122W	9	19	33	10754.9	0.000341997
9	YCR072C	12	17	23	10749.7	0.000341832
10	YDR189W	2	7	19	10742.7	0.000341609
11	YFL023W	0	11	33	10737.3	0.000341438
12	YGR178C	1	21	30	10729	0.000341174
13	YJR066W	31	61	112	10716.1	0.000340764
14	YKL101W	7	40	75	10708.1	0.000340509
15	YLR222C	13	19	24	10697.9	0.000340185
16	YGL022W	5	12	32	10661.5	0.000339027
17	YJR143C	11	27	25	10659	0.000338948
18	YDR227W	5	26	48	10584.1	0.000336566
19	YOL064C	6	11	14	10576.7	0.000336331
20	YKL173W	9	17	40	10572.1	0.000336184
21	YJR121W	1	7	25	10560.9	0.000335828
22	YKR043C	4	9	22	10551.5	0.000335529
23	YKL127W	7	10	23	10544.6	0.00033531
24	YOR298C-A	0	0	15	10542	0.000335227
25	YGR261C	12	15	35	10498	0.000333828
26	YDL190C	10	18	42	10485.8	0.00033344
27	YPL240C	0	4	27	10456.7	0.000332515
28	YNL091W	7	38	60	10436.2	0.000331863
29	YGL097W	9	15	19	10428.2	0.000331609
30	YJL197W	19	19	44	10416.3	0.00033123
31	YEL003W	1	2	3	10412.8	0.000331119
32	YNL250W	9	22	59	10411.3	0.000331071
33	YLR172C	5	6	13	10409.9	0.000331027
34	YPR110C	5	5	18	10409.8	0.000331023
35	YJL176C	2	14	26	10409	0.000330998
36	YPL146C	1	12	20	10404.6	0.000330858
37	YBL023C	9	17	77	10401	0.000330744
38	YMR125W	4	8	38	10387.9	0.000330327
39	YBL030C	4	0	15	10381.6	0.000330127
40	YDL147W	2	11	15	10375.9	0.000329945
41	YBR275C	19	42	79	10367	0.000329662
42	YBR247C	2	9	24	10335.4	0.000328658
43	YLR195C	6	7	19	10321.7	0.000328222
44	YGL244W	2	9	45	10282.9	0.000326988
45	YGR130C	1	14	27	10281.9	0.000326956
46	YOR304W	6	24	61	10280.7	0.000326918
47	YIL022W	1	4	32	10266	0.000326451
48	YFL038C	4	1	7	10259.7	0.00032625
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2	YDR194C	7	12	51	10252.3	0.000326015
3	YNL002C	2	4	25	10242.2	0.000325694
4	YBR140C	40	70	115	10231	0.000325338
5	YDL097C	6	10	13	10208.7	0.000324629
6	YBR078W	4	0	3	10206.4	0.000324555
7	YIL033C	2	8	22	10198.6	0.000324307
8	YDR301W	12	25	58	10190	0.000324034
9	YDR062W	14	12	34	10187.1	0.000323942
10	YGL133W	14	19	68	10181.4	0.00032376
11	YOL123W	2	6	28	10179	0.000323684
12	YER166W	25	25	84	10172.9	0.00032349
13	YOL039W	0	0	0	10168.1	0.000323338
14	YER171W	13	14	49	10160.7	0.000323102
15	YJL123C	0	6	8	10152.1	0.000322829
16	YJR041C	22	31	34	10145.5	0.000322619
17	YMR308C	15	16	32	10131.7	0.00032218
18	YBR198C	9	18	33	10113.7	0.000321608
19	YBR177C	5	10	24	10093.8	0.000320975
20	YGL228W	9	12	27	10072.1	0.000320285
21	YML130C	14	6	23	10061.4	0.000319945
22	YJR132W	20	10	31	10044.5	0.000319407
23	YGR210C	5	7	20	10039.2	0.000319239
24	YIL129C	30	46	98	10021.2	0.000318666
25	YPL210C	7	11	27	10016.6	0.00031852
26	YKL021C	8	17	22	10013.8	0.000318431
27	YER080W	5	11	24	10012.5	0.00031839
28	YLR002C	8	9	36	10008	0.000318246
29	YFL047W	13	16	28	9993.87	0.000317797
30	YGL122C	21	12	27	9973.47	0.000317148
31	YJL042W	15	44	67	9959.84	0.000316715
32	YIL063C	1	2	8	9954.88	0.000316557
33	YML080W	7	9	22	9954.21	0.000316536
34	YDR083W	5	5	24	9951.58	0.000316452
35	YMR192W	6	14	29	9943.01	0.00031618
36	YIL051C	1	3	5	9935.07	0.000315927
37	YAL017W	12	35	52	9887.19	0.000314405
38	YLR264W	0	0	10	9874.28	0.000313994
39	YFL036W	8	33	65	9870.65	0.000313879
40	YBR205W	7	14	20	9865.87	0.000313727
41	YMR178W	7	7	10	9863.46	0.00031365
42	YLR357W	5	16	66	9860.13	0.000313544
43	YAL001C	7	16	64	9854.33	0.00031336
44	YNL075W	2	9	27	9814.2	0.000312084
45	YMR092C	8	13	20	9798.96	0.000311599
46	YNL207W	5	11	26	9793.5	0.000311426
47	YPL137C	14	23	49	9791.83	0.000311372
48	YDR356W	2	14	69	9789.62	0.000311302
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2	YKL099C	0	9	21	9786.38	0.000311199
3	YOR069W	2	9	32	9778.24	0.00031094
4	YOL049W	3	4	18	9776.52	0.000310886
5	YPR137W	6	8	34	9750.5	0.000310058
6	YJL145W	5	3	7	9747.92	0.000309976
7	YNL186W	8	16	25	9744.09	0.000309854
8	YBR229C	6	35	34	9735.34	0.000309576
9	YKR071C	9	3	4	9734	0.000309534
10	YOR001W	3	17	43	9732.64	0.00030949
11	YPR148C	5	6	10	9730.47	0.000309421
12	YNL048W	7	9	16	9725.87	0.000309275
13	YKL143W	0	7	22	9719.52	0.000309073
14	YGR001C	5	5	8	9717.9	0.000309022
15	YER156C	4	7	17	9714.97	0.000308928
16	YHR088W	1	8	23	9714.23	0.000308905
17	YFR052W	1	4	4	9704.34	0.00030859
18	YCL011C	6	5	50	9703.09	0.000308551
19	YDR407C	18	17	50	9697.25	0.000308365
20	YGR256W	6	11	24	9696.05	0.000308327
21	YAR042W	8	35	52	9695.51	0.00030831
22	YDR283C	7	29	87	9693.16	0.000308235
23	YLR186W	6	6	13	9681.82	0.000307874
24	YLR083C	10	14	20	9659.35	0.00030716
25	YLR045C	6	10	44	9627.28	0.00030614
26	YDR074W	11	18	43	9623.6	0.000306023
27	YPL225W	1	1	8	9604.46	0.000305414
28	YLR319C	5	14	38	9588.52	0.000304907
29	YDR028C	3	33	39	9586.65	0.000304848
30	YLL013C	3	26	22	9576.53	0.000304526
31	YOR128C	9	14	22	9570.99	0.00030435
32	YKL181W	8	12	26	9567.67	0.000304244
33	YOL027C	3	6	24	9565.89	0.000304188
34	YOR374W	5	8	18	9564.66	0.000304149
35	YOR124C	13	24	55	9558.75	0.000303961
36	YEL042W	11	9	15	9557.28	0.000303914
37	YLR086W	9	22	74	9549.94	0.000303681
38	YKL211C	9	15	18	9548.56	0.000303637
39	YPL094C	3	5	14	9521.28	0.000302769
40	YGL106W	0	0	5	9513.98	0.000302537
41	YGL014W	11	29	21	9513.26	0.000302514
42	YKR024C	9	27	40	9505.48	0.000302267
43	YHR049W	1	8	6	9496.75	0.000301989
44	YGR271W	21	52	93	9484.94	0.000301614
45	YDR038C	16	20	41	9474.94	0.000301296
46	YEL013W	13	10	24	9449.1	0.000300474
47	YEL036C	1	14	25	9447.41	0.00030042
48	YDL225W	2	9	32	9444.72	0.000300335
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2	YDL150W	0	6	26	9440.95	0.000300215
3	YNL055C	2	3	5	9440.54	0.000300202
4	YBR260C	5	16	22	9440.13	0.000300189
5	YDL135C	0	3	5	9417.55	0.000299471
6	YMR047C	4	7	19	9413.98	0.000299357
7	YBR035C	1	4	21	9408.58	0.000299185
8	YJR033C	25	34	55	9404.01	0.00029904
9	YPL260W	6	16	25	9392.16	0.000298663
10	YDR216W	22	37	61	9390.99	0.000298626
11	YIL094C	5	4	20	9369.18	0.000297933
12	YHR163W	4	5	8	9363.47	0.000297751
13	YPR118W	4	4	13	9355.51	0.000297498
14	YDR545W	36	31	120	9354.31	0.00029746
15	YIL125W	7	34	49	9353.23	0.000297425
16	YML094W	1	2	2	9352.95	0.000297416
17	YBR155W	5	3	16	9350.8	0.000297348
18	YKL203C	31	65	120	9350.8	0.000297348
19	YGL203C	7	17	16	9350.26	0.000297331
20	YEL058W	12	15	20	9344.03	0.000297133
21	YGR119C	1	3	12	9341.65	0.000297057
22	YLR179C	2	3	3	9339.91	0.000297002
23	YKL205W	19	11	21	9331.76	0.000296743
24	YBR145W	10	10	9	9327.98	0.000296622
25	YHR154W	16	29	29	9325.2	0.000296534
26	YDL051W	2	4	20	9311.49	0.000296098
27	YBR102C	6	11	43	9304.47	0.000295875
28	YPR032W	8	16	42	9290.68	0.000295436
29	YMR212C	10	13	32	9288.84	0.000295378
30	YHR039C	16	12	21	9278.48	0.000295048
31	YML111W	14	27	44	9273.44	0.000294888
32	YLR330W	5	14	14	9272.62	0.000294862
33	YBR279W	0	7	23	9267.53	0.0002947
34	YER031C	3	3	8	9258.33	0.000294408
35	YEL051W	0	1	21	9249.02	0.000294112
36	YPR161C	5	23	36	9245.8	0.000294009
37	YJR125C	0	5	17	9229.61	0.000293494
38	YER176W	20	17	58	9200.39	0.000292565
39	YER089C	12	15	17	9187.99	0.000292171
40	YGL151W	11	19	28	9182.77	0.000292005
41	YDR361C	2	6	11	9175.79	0.000291783
42	YLR114C	6	15	24	9174.71	0.000291749
43	YDL168W	15	9	11	9170.13	0.000291603
44	YKL010C	23	34	71	9168.86	0.000291563
45	YBR208C	31	23	74	9156.31	0.000291163
46	YJR031C	16	19	49	9140.01	0.000290645
47	YOL111C	0	7	3	9133.26	0.00029043
48	YFR004W	1	8	12	9123.61	0.000290124
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2	YDR304C	2	8	7	9112.53	0.000289771
3	YPL262W	8	15	15	9095.96	0.000289244
4	YJL054W	4	5	23	9093.41	0.000289163
5	YPR097W	7	21	34	9092.6	0.000289137
6	YDR266C	19	22	33	9090.11	0.000289058
7	YDR320C	2	9	19	9081.86	0.000288796
8	YOR211C	7	18	39	9074.71	0.000288569
9	YOL061W	7	11	20	9072.29	0.000288492
10	YJR137C	7	28	52	9071.99	0.000288482
11	YPL273W	6	5	11	9071.65	0.000288471
12	YKL114C	5	8	12	9066.52	0.000288308
13	YDR326C	6	40	56	9064.61	0.000288247
14	YDR035W	8	7	20	9048.18	0.000287725
15	YLR449W	1	3	12	9039.26	0.000287441
16	YDR398W	7	13	24	9013.49	0.000286622
17	YLR100W	1	3	13	9000.85	0.00028622
18	YNL236W	14	20	33	8989.08	0.000285846
19	YMR072W	0	3	9	8986.7	0.00028577
20	YDL124W	1	5	8	8979.2	0.000285531
21	YKR084C	5	13	24	8977.12	0.000285465
22	YLR450W	19	21	37	8970.39	0.000285251
23	YMR089C	5	13	49	8944.39	0.000284425
24	YDR368W	2	6	10	8930.39	0.000283979
25	YHR135C	4	17	26	8920	0.000283649
26	YEL030W	0	6	34	8916.53	0.000283539
27	YOL151W	4	9	10	8910.04	0.000283332
28	YGR187C	7	6	17	8907.47	0.000283251
29	YBR094W	8	17	20	8903.97	0.000283139
30	YBR267W	7	11	23	8891.6	0.000282746
31	YHR107C	2	11	29	8889.52	0.00028268
32	YHR098C	18	21	33	8888.66	0.000282652
33	YJR117W	3	13	11	8877.47	0.000282297
34	YNL049C	13	14	45	8877.35	0.000282293
35	YPL190C	2	18	29	8869.68	0.000282049
36	YOR091W	6	5	18	8860.48	0.000281756
37	YDL167C	15	21	27	8858.98	0.000281709
38	YER008C	9	28	73	8857.32	0.000281656
39	YDR017C	16	38	54	8856.52	0.00028163
40	YBR059C	6	26	57	8855.38	0.000281594
41	YML074C	0	3	12	8836.83	0.000281004
42	YDR087C	1	3	16	8835.17	0.000280951
43	YMR120C	6	12	28	8822.71	0.000280555
44	YOR290C	8	37	102	8818.5	0.000280421
45	YER168C	5	14	21	8817.81	0.000280399
46	YOL070C	0	5	30	8807.4	0.000280068
47	YOR232W	0	4	15	8807.21	0.000280062
48	YDR406W	29	29	73	8803.54	0.000279946
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2	YDR487C	6	7	10	8801.68	0.000279886
3	YBR227C	5	8	26	8768.88	0.000278843
4	YOR188W	10	29	53	8760.88	0.000278589
5	YGL016W	20	17	27	8742.25	0.000277997
6	YBR154C	3	4	17	8742.13	0.000277993
7	YLR043C	2	0	0	8728.07	0.000277546
8	YOR141C	8	17	32	8726.84	0.000277507
9	YLR248W	5	12	21	8724.92	0.000277446
10	YKL196C	3	3	8	8723.77	0.000277409
11	YLL001W	10	9	38	8717.5	0.00027721
12	YPR171W	1	6	38	8716.76	0.000277186
13	YLR447C	6	5	15	8715.21	0.000277137
14	YMR214W	8	9	16	8706.01	0.000276844
15	YML022W	1	2	4	8704.45	0.000276795
16	YMR239C	1	6	22	8693.46	0.000276445
17	YML059C	10	50	74	8681.69	0.000276071
18	YGR193C	2	4	8	8681.36	0.00027606
19	YLL050C	1	1	7	8669.87	0.000275695
20	YML105C	3	5	17	8660.9	0.00027541
21	YHR148W	2	8	17	8660.73	0.000275404
22	YPR034W	4	4	15	8653.21	0.000275165
23	YDL052C	5	7	11	8647.63	0.000274988
24	YFR053C	4	9	18	8620.17	0.000274115
25	YPL169C	1	8	22	8578.33	0.000272784
26	YNL110C	0	6	8	8571.75	0.000272575
27	YPL127C	1	0	4	8568.1	0.000272459
28	YOR171C	12	12	21	8540.52	0.000271582
29	YIL005W	9	16	31	8540.48	0.000271581
30	YMR099C	2	9	5	8537.68	0.000271491
31	YML092C	0	3	9	8532.74	0.000271334
32	YHR001W	1	14	18	8519.67	0.000270919
33	YGL111W	3	8	16	8500.22	0.0002703
34	YMR275C	12	32	47	8499.59	0.00027028
35	YDR311W	5	14	26	8486.1	0.000269851
36	YIL030C	18	29	61	8479.7	0.000269648
37	YOR241W	5	13	24	8468.58	0.000269294
38	YFR006W	10	17	29	8454.84	0.000268857
39	YMR219W	7	42	59	8447.8	0.000268633
40	YNL251C	5	15	30	8441.94	0.000268447
41	YER002W	0	1	20	8420.6	0.000267768
42	YBR179C	6	17	38	8414.89	0.000267587
43	YIR004W	2	6	13	8410.47	0.000267446
44	YGR005C	3	7	26	8395.32	0.000266965
45	YDR122W	6	37	58	8384.44	0.000266619
46	YOR336W	11	25	56	8384.08	0.000266607
47	YDR508C	13	10	27	8383.96	0.000266603
48	YPR173C	2	3	19	8381.85	0.000266536
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2	YOR340C	2	9	9	8380.8	0.000266503
3	YER088C	4	24	31	8367.53	0.000266081
4	YGL086W	7	7	27	8365.08	0.000266003
5	YDR258C	7	11	60	8358.24	0.000265785
6	YKR002W	8	10	30	8345.33	0.000265375
7	YKL068W	5	7	14	8344.72	0.000265356
8	YHR201C	5	7	19	8342.4	0.000265282
9	YJR069C	1	4	5	8331.87	0.000264947
10	YNL041C	5	10	30	8323.5	0.000264681
11	YPR190C	4	9	34	8320.5	0.000264585
12	YOL059W	7	21	21	8319.32	0.000264548
13	YDL164C	16	10	37	8317.18	0.00026448
14	YLR300W	8	11	17	8316.96	0.000264473
15	YKR066C	1	8	14	8306.91	0.000264153
16	YER042W	5	5	7	8306.44	0.000264138
17	YKL135C	14	11	26	8304.96	0.000264091
18	YNR038W	5	11	22	8300.02	0.000263934
19	YJL121C	5	9	6	8292.07	0.000263681
20	YOR362C	3	9	9	8284.89	0.000263453
21	YOL081W	38	101	136	8267.54	0.000262901
22	YHR021C	5	3	4	8262	0.000262725
23	YHR186C	19	34	71	8258.52	0.000262614
24	YFR038W	8	14	31	8255.17	0.000262508
25	YBR049C	6	29	36	8249.49	0.000262327
26	YJL128C	6	18	30	8244.59	0.000262171
27	YPR183W	3	6	13	8243.67	0.000262142
28	YKR048C	4	4	14	8238.84	0.000261989
29	YDL116W	7	15	27	8232.15	0.000261776
30	YGR274C	4	28	43	8220.35	0.000261401
31	YDR465C	4	8	16	8215.71	0.000261253
32	YBR172C	2	12	20	8198.26	0.000260698
33	YJL204C	10	7	26	8196.16	0.000260631
34	YIL020C	8	6	10	8187.85	0.000260367
35	YGL020C	0	7	4	8160.04	0.000259483
36	YAL031C	10	18	42	8151.18	0.000259201
37	YKR031C	16	60	107	8127.13	0.000258436
38	YBR092C	8	6	15	8110.23	0.000257899
39	YER069W	8	15	36	8108.38	0.00025784
40	YHR074W	19	16	42	8105.92	0.000257762
41	YMR153W	1	5	19	8100.81	0.000257599
42	YDR477W	4	31	22	8097.07	0.00025748
43	YBL068W	5	10	14	8095.04	0.000257416
44	YIL130W	13	15	41	8071.7	0.000256674
45	YOR020C	0	0	3	8058.33	0.000256249
46	YJR138W	16	39	82	8054.27	0.000256119
47	YOL052C	8	12	9	8045.95	0.000255855
48	YKR003W	3	12	19	8040.16	0.000255671
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2	YKL126W	5	13	26	8020.63	0.00025505
3	YPR169W	11	13	15	8019.57	0.000255016
4	YNL292W	2	8	15	8011.63	0.000254764
5	YHL039W	7	7	18	8009.16	0.000254685
6	YHR094C	18	6	21	8005.66	0.000254574
7	YNL166C	3	9	16	8005.5	0.000254569
8	YKR090W	16	10	36	8001.89	0.000254454
9	YJR134C	2	11	28	7980.67	0.000253779
10	YGL252C	10	13	39	7977.3	0.000253672
11	YDR243C	3	9	28	7976.8	0.000253656
12	YOR356W	9	12	22	7975.43	0.000253612
13	YBR010W	0	2	17	7963.25	0.000253225
14	YBL037W	12	11	41	7961.66	0.000253174
15	YDR145W	2	5	28	7958.58	0.000253077
16	YKL054C	0	16	7	7958.28	0.000253067
17	YOR057W	1	7	11	7947.04	0.00025271
18	YMR062C	7	2	13	7921.4	0.000251894
19	YGL190C	5	15	22	7917.92	0.000251784
20	YDR527W	4	10	14	7903.53	0.000251326
21	YJL183W	3	14	16	7868.81	0.000250222
22	YOL051W	4	13	34	7858.06	0.00024988
23	YLR291C	3	9	21	7848.97	0.000249591
24	YPL049C	1	12	24	7845.84	0.000249492
25	YHR037W	5	9	21	7842.38	0.000249381
26	YPL211W	1	7	9	7837.72	0.000249233
27	YGL011C	3	4	11	7833.02	0.000249084
28	YBR017C	16	19	23	7816.53	0.000248559
29	YLR071C	9	27	41	7790.04	0.000247717
30	YGR286C	10	10	18	7771.98	0.000247143
31	YDL213C	0	3	17	7770.8	0.000247105
32	YOL058W	9	3	20	7770.46	0.000247094
33	YBR149W	3	10	13	7756.39	0.000246647
34	YOR222W	5	1	14	7749.38	0.000246424
35	YIR003W	2	14	28	7742.83	0.000246216
36	YIL048W	17	29	49	7742.68	0.000246211
37	YDR335W	23	18	53	7737.95	0.000246061
38	YNR031C	15	26	71	7730.27	0.000245816
39	YGL145W	5	12	20	7724.44	0.000245631
40	YCR033W	4	35	74	7724.24	0.000245625
41	YKL024C	4	2	13	7722.26	0.000245562
42	YNL298W	10	26	35	7722.18	0.000245559
43	YNL001W	5	6	2	7720.1	0.000245493
44	YHR114W	4	10	21	7715.08	0.000245333
45	YAL043C	4	12	29	7689.28	0.000244513
46	YDL201W	4	9	16	7676.69	0.000244113
47	YER021W	7	13	19	7674.85	0.000244054
48	YHL011C	5	6	21	7661.42	0.000243627
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2	YOR176W	3	7	16	7658.6	0.000243537
3	YDR234W	9	16	20	7658.16	0.000243523
4	YLR003C	2	1	13	7656.67	0.000243476
5	YLR413W	9	7	10	7653.86	0.000243387
6	YFR051C	1	14	25	7644.8	0.000243099
7	YBR221C	1	4	19	7636.82	0.000242845
8	YOR267C	19	47	31	7620.99	0.000242341
9	YKL213C	8	10	19	7599.72	0.000241665
10	YOR061W	5	8	15	7595.61	0.000241534
11	YIR026C	9	10	16	7589.33	0.000241335
12	YEL026W	3	1	5	7587.98	0.000241292
13	YNL084C	4	3	13	7582.83	0.000241128
14	YNL059C	3	16	40	7572.17	0.000240789
15	YLR022C	5	4	9	7556.71	0.000240297
16	YHR169W	4	9	29	7550.52	0.000240101
17	YLR438W	8	20	12	7542.31	0.000239839
18	YLR032W	16	21	64	7540.08	0.000239769
19	YNL045W	6	21	29	7520.93	0.00023916
20	YOR101W	3	1	18	7513.9	0.000238936
21	YBR074W	9	26	39	7513.67	0.000238929
22	YML075C	17	18	42	7511.81	0.00023887
23	YMR093W	5	15	33	7503.81	0.000238615
24	YCR035C	5	5	23	7497.73	0.000238422
25	YPR105C	4	18	32	7495.45	0.000238349
26	YLR166C	4	17	26	7482.02	0.000237922
27	YDR429C	4	3	20	7479.69	0.000237848
28	YPR072W	6	10	25	7475.85	0.000237726
29	YNL154C	3	19	26	7474.51	0.000237684
30	YPL032C	3	20	27	7470.48	0.000237555
31	YNL290W	5	5	21	7460.15	0.000237227
32	YDR153C	2	7	27	7458.3	0.000237168
33	YER017C	4	15	47	7439.86	0.000236582
34	YNL016W	3	8	17	7434.37	0.000236407
35	YML078W	2	3	7	7427.08	0.000236175
36	YBR235W	16	17	44	7416.28	0.000235832
37	YIL140W	4	14	26	7396.59	0.000235206
38	YLL015W	17	16	72	7386.51	0.000234885
39	YER127W	1	7	31	7384.92	0.000234835
40	YBR170C	10	18	22	7377.96	0.000234613
41	YDL125C	2	8	2	7374.47	0.000234502
42	YAL042W	10	16	21	7369.04	0.00023433
43	YDL236W	5	3	10	7367.69	0.000234287
44	YKR056W	11	11	32	7367.13	0.000234269
45	YER157W	10	10	36	7366.35	0.000234244
46	YDR412W	0	3	19	7356.55	0.000233932
47	YJL061W	9	10	25	7356.4	0.000233928
48	YLR039C	17	25	24	7345.6	0.000233584
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2	YIL068C	9	12	32	7332.34	0.000233163
3	YBR252W	0	1	7	7330.5	0.000233104
4	YBR041W	9	15	30	7328.48	0.00023304
5	YCL031C	3	11	10	7324.75	0.000232921
6	YBR101C	2	4	9	7322.55	0.000232851
7	YJL168C	17	14	32	7317.76	0.000232699
8	YMR207C	21	43	119	7314.55	0.000232597
9	YPL199C	3	9	7	7305.2	0.0002323
10	YMR278W	6	19	21	7297.42	0.000232052
11	YAL062W	6	4	16	7280.91	0.000231527
12	YGR279C	5	3	6	7277.79	0.000231428
13	YLR409C	8	24	50	7275.56	0.000231357
14	YGR083C	4	7	23	7267.03	0.000231086
15	YHR103W	9	15	42	7262.35	0.000230937
16	YNL264C	4	8	18	7262.21	0.000230933
17	YCL024W	4	20	54	7258.36	0.00023081
18	YNL244C	2	2	5	7251.47	0.000230591
19	YKL142W	0	2	9	7250.94	0.000230574
20	YML100W	7	27	46	7245.24	0.000230393
21	YLR422W	31	48	96	7244.56	0.000230371
22	YOR281C	2	5	16	7214.52	0.000229416
23	YCR030C	3	17	40	7205.31	0.000229123
24	YIL009W	10	16	28	7202.02	0.000229019
25	YBR055C	11	11	53	7198.43	0.000228904
26	YJL172W	4	26	18	7198.18	0.000228896
27	YBR111C	4	3	12	7194.21	0.00022877
28	YLR096W	6	33	63	7183.21	0.00022842
29	YPL019C	2	14	44	7177.12	0.000228227
30	YGR020C	0	3	6	7173	0.000228096
31	YNR054C	1	5	17	7167.74	0.000227928
32	YMR218C	17	16	44	7163.19	0.000227784
33	YMR091C	2	10	29	7155.48	0.000227539
34	YFL002C	6	6	35	7155.38	0.000227535
35	YGR047C	9	18	67	7150.44	0.000227378
36	YFL005W	3	1	7	7144.05	0.000227175
37	YLR287C	5	3	10	7137	0.000226951
38	YBR123C	3	10	19	7135.21	0.000226894
39	YGR012W	8	10	17	7133.95	0.000226854
40	YNL257C	18	16	52	7121.1	0.000226445
41	YGR056W	9	19	48	7116.79	0.000226308
42	YGR148C	0	2	17	7110.49	0.000226108
43	YGL232W	7	4	14	7102.9	0.000225867
44	YMR005W	1	8	22	7094.95	0.000225614
45	YDR359C	7	21	70	7086.85	0.000225356
46	YIL026C	11	24	42	7080.89	0.000225167
47	YAL021C	9	26	25	7068.03	0.000224758
48	YOR271C	2	8	16	7046.81	0.000224083
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2	YKR025W	0	4	12	7046.76	0.000224081
3	YHR205W	9	31	24	7046.1	0.00022406
4	YGL197W	16	26	78	7039.35	0.000223846
5	YNL267W	8	22	53	7036.16	0.000223744
6	YHL013C	6	9	14	7034.5	0.000223692
7	YDR117C	6	15	13	7032.29	0.000223621
8	YER012W	1	4	11	7031.75	0.000223604
9	YKL117W	1	6	3	7021.34	0.000223273
10	YLR347C	11	6	27	7016.64	0.000223124
11	YKL112W	3	39	20	7003.28	0.000222699
12	YFR013W	4	15	38	6998.22	0.000222538
13	YDL161W	2	5	29	6993.08	0.000222374
14	YJL081C	7	6	20	6990.07	0.000222279
15	YOR260W	11	10	21	6986.68	0.000222171
16	YDR152W	3	5	9	6967.05	0.000221547
17	YBR054W	5	6	9	6966.92	0.000221543
18	YHR013C	2	7	13	6954.86	0.000221159
19	YOR014W	8	18	29	6954.64	0.000221152
20	YER114C	2	14	61	6948.62	0.000220961
21	YGL101W	6	5	12	6921.81	0.000220108
22	YOR004W	5	5	19	6918.95	0.000220017
23	YLR208W	3	12	8	6914.56	0.000219878
24	YGR196C	1	16	26	6914.52	0.000219876
25	YJR005W	6	13	33	6897.89	0.000219347
26	YDL141W	9	15	22	6893.9	0.000219221
27	YHR028C	1	24	32	6893.65	0.000219213
28	YGL125W	10	17	22	6890.12	0.0002191
29	YFL034W	15	22	51	6882.48	0.000218857
30	YKR028W	8	18	32	6873.95	0.000218586
31	YNL035C	9	15	13	6868.03	0.000218398
32	YEL037C	4	2	14	6859.91	0.00021814
33	YJL060W	6	6	16	6851.33	0.000217867
34	YLR056W	4	18	14	6850.75	0.000217848
35	YNL039W	3	11	38	6846.3	0.000217707
36	YFL002W-A	15	64	73	6837.82	0.000217437
37	YBR058C	27	16	22	6818.68	0.000216829
38	YOR230W	2	11	15	6816.78	0.000216768
39	YDL240W	30	22	41	6815.85	0.000216739
40	YOR021C	1	2	13	6812.8	0.000216642
41	YML127W	9	7	25	6793.54	0.000216029
42	YPL184C	9	10	29	6791.92	0.000215978
43	YNR035C	3	9	20	6788.27	0.000215862
44	YML065W	6	11	49	6777.67	0.000215525
45	YGL112C	2	10	19	6766.31	0.000215163
46	YDR294C	9	19	21	6764.66	0.000215111
47	YPR135W	12	24	31	6763.64	0.000215078
48	YKL128C	4	15	17	6759.81	0.000214957
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2	YDR264C	12	21	24	6744.73	0.000214477
3	YLR387C	9	11	28	6733.93	0.000214134
4	YNL281W	1	3	2	6719.9	0.000213688
5	YMR189W	17	34	42	6714.38	0.000213512
6	YPL249C	2	17	41	6702.86	0.000213146
7	YJL001W	4	4	8	6696.3	0.000212937
8	YPL117C	7	10	10	6693.63	0.000212852
9	YBL011W	9	19	38	6691.61	0.000212788
10	YDR325W	15	18	49	6685.29	0.000212587
11	YPR129W	1	3	22	6681.41	0.000212464
12	YMR304W	7	29	52	6677.64	0.000212344
13	YCR081W	22	40	35	6664.02	0.000211911
14	YDR001C	6	16	44	6648.29	0.00021141
15	YJR068W	5	6	18	6646.72	0.00021136
16	YLR336C	5	12	49	6634.55	0.000210973
17	YOR370C	8	7	18	6614.26	0.000210328
18	YJL098W	10	19	40	6610.22	0.0002102
19	YNL256W	12	21	35	6606.55	0.000210083
20	YMR029C	2	13	12	6603.24	0.000209978
21	YPR048W	9	13	36	6601.91	0.000209936
22	YPR125W	2	7	27	6595.36	0.000209727
23	YOR175C	9	14	33	6594.25	0.000209692
24	YMR208W	9	10	9	6583.34	0.000209345
25	YGL006W	17	13	54	6575.44	0.000209094
26	YDR458C	10	11	29	6573.48	0.000209031
27	YCR011C	33	10	39	6569.47	0.000208904
28	YGL036W	8	21	19	6568.09	0.00020886
29	YLR270W	4	10	16	6560.57	0.000208621
30	YFL028C	3	7	18	6560.12	0.000208607
31	YIL104C	3	8	20	6555.7	0.000208466
32	YPL023C	6	17	32	6550.7	0.000208307
33	YGR009C	0	6	42	6532.93	0.000207742
34	YLR262C-A	0	0	1	6530.84	0.000207676
35	YOL045W	11	31	36	6524.16	0.000207463
36	YJR032W	7	5	16	6516.65	0.000207224
37	YDR068W	2	5	6	6515.52	0.000207188
38	YKL094W	4	12	11	6514.19	0.000207146
39	YCR042C	26	30	60	6504.69	0.000206844
40	YJR060W	1	9	19	6497.02	0.0002066
41	YHR113W	4	18	21	6493.17	0.000206478
42	YNL221C	17	23	65	6489.06	0.000206347
43	YMR039C	0	3	19	6488.62	0.000206333
44	YFL010C	0	3	5	6485.79	0.000206243
45	YGL231C	0	2	4	6480.69	0.000206081
46	YIL039W	6	18	15	6469.73	0.000205732
47	YBR029C	12	12	10	6466.72	0.000205637
48	YKR081C	2	7	17	6456.29	0.000205305
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2	YLR421C	2	0	6	6443.1	0.000204885
3	YKL165C	5	26	30	6442.06	0.000204852
4	YOR089C	2	3	9	6441.48	0.000204834
5	YPL245W	7	8	31	6440.05	0.000204789
6	YPL058C	31	36	70	6421.83	0.000204209
7	YLR337C	0	15	19	6420.31	0.000204161
8	YDR232W	6	22	22	6419.92	0.000204148
9	YER013W	12	22	62	6397.67	0.000203441
10	YGR266W	12	27	30	6396.93	0.000203417
11	YOL088C	8	6	15	6394.8	0.00020335
12	YKL092C	12	15	44	6387.97	0.000203132
13	YDR098C	3	6	6	6384	0.000203006
14	YDL065C	2	4	6	6382.63	0.000202963
15	YOL080C	1	9	15	6380.87	0.000202907
16	YNL022C	12	13	24	6378.66	0.000202836
17	YBL104C	23	19	64	6375.34	0.000202731
18	YML071C	6	6	28	6373.68	0.000202678
19	YDR333C	5	18	34	6369.06	0.000202531
20	YGL140C	19	25	57	6365.53	0.000202419
21	YMR145C	2	7	25	6364.31	0.00020238
22	YLR048W	1	5	15	6359.46	0.000202226
23	YJL192C	0	2	13	6351.89	0.000201985
24	YDR295C	6	16	27	6350.8	0.00020195
25	YLR310C	12	33	66	6348.51	0.000201878
26	YOR210W	4	1	7	6346.03	0.000201799
27	YDL193W	4	8	15	6344.56	0.000201752
28	YBL034C	14	26	44	6343.66	0.000201723
29	YBR028C	5	14	22	6340.98	0.000201638
30	YNL258C	7	14	26	6340.54	0.000201624
31	YML049C	23	40	50	6318.49	0.000200923
32	YBR202W	12	10	46	6318.09	0.00020091
33	YDR080W	12	22	31	6313.87	0.000200776
34	YPL016W	8	13	36	6301.45	0.000200381
35	YIL112W	2	21	61	6297.62	0.000200259
36	YER149C	1	11	18	6297.2	0.000200246
37	YNL137C	3	10	26	6294.34	0.000200155
38	YDR251W	5	11	33	6291.05	0.00020005
39	YDR180W	20	32	54	6286.57	0.000199908
40	YOR187W	3	14	29	6286.25	0.000199898
41	YFL013C	4	7	31	6278.08	0.000199638
42	YDL121C	0	2	6	6276.77	0.000199596
43	YJR042W	12	5	27	6266.62	0.000199274
44	YBR126C	4	15	15	6264.49	0.000199206
45	YPL105C	3	8	32	6250.33	0.000198756
46	YGR198W	11	14	24	6246.5	0.000198634
47	YHR089C	3	1	25	6241.51	0.000198475
48	YLR148W	12	20	24	6239.71	0.000198418
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2	YCL001W	2	4	9	6234.08	0.000198239
3	YLR382C	12	16	35	6228.65	0.000198066
4	YIL155C	8	13	30	6227.03	0.000198015
5	YPL204W	5	14	32	6224.1	0.000197921
6	YPR159W	6	15	26	6217.04	0.000197697
7	YNL106C	14	25	63	6212.3	0.000197546
8	YGR253C	3	6	11	6210.2	0.000197479
9	YAR002C-A	5	6	8	6203.1	0.000197254
10	YKL062W	4	21	25	6196.63	0.000197048
11	YIL128W	13	15	25	6194.59	0.000196983
12	YGL013C	24	24	43	6191.98	0.0001969
13	YHR102W	8	17	38	6191.92	0.000196898
14	YMR314W	3	4	12	6181.16	0.000196556
15	YAL044W-/	1	6	6	6180.67	0.00019654
16	YKL110C	6	6	11	6179.64	0.000196508
17	YHR046C	7	4	7	6178.8	0.000196481
18	YOL016C	3	10	20	6176.05	0.000196394
19	YBL050W	7	3	10	6173.46	0.000196311
20	YML001W	4	2	7	6166.92	0.000196103
21	YOL115W	3	18	25	6166.09	0.000196077
22	YMR216C	10	24	35	6161.74	0.000195938
23	YNL273W	7	19	59	6158.97	0.00019585
24	YBL100W-/	3	18	15	6158.13	0.000195824
25	YLR442C	7	13	41	6157.83	0.000195814
26	YNL215W	1	3	25	6156.94	0.000195786
27	YHR084W	7	9	27	6154.18	0.000195698
28	YIL108W	14	19	32	6153.12	0.000195664
29	YFR041C	2	3	11	6150.12	0.000195569
30	YEL002C	4	8	17	6149.31	0.000195543
31	YKL113C	7	7	21	6102.85	0.000194066
32	YDL022W	10	12	13	6099.24	0.000193951
33	YMR227C	1	13	24	6098.16	0.000193917
34	YKL079W	6	15	27	6090.21	0.000193664
35	YMR302C	4	14	47	6089.83	0.000193652
36	YBL101C	7	24	60	6085.9	0.000193527
37	YPR086W	10	5	16	6085.42	0.000193512
38	YMR033W	4	8	14	6085.25	0.000193506
39	YLR274W	9	12	46	6084.89	0.000193495
40	YPR175W	5	13	32	6075.06	0.000193182
41	YDR510W	0	2	6	6074.81	0.000193174
42	YNL201C	12	23	31	6074.41	0.000193161
43	YPR025C	5	7	15	6071.68	0.000193075
44	YHR070W	8	18	19	6067.29	0.000192935
45	YNR001C	1	13	21	6064.19	0.000192836
46	YDR408C	5	7	6	6060.38	0.000192715
47	YLR069C	10	13	42	6060	0.000192703
48	YKL193C	1	9	8	6058.53	0.000192656
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2	YGR282C	4	2	4	6054.38	0.000192525
3	YDR334W	14	41	85	6043.51	0.000192179
4	YPL115C	7	25	44	6038.38	0.000192016
5	YPR104C	2	19	37	6034.25	0.000191884
6	YBR283C	4	4	13	6034.14	0.000191881
7	YCL040W	7	15	22	6032.17	0.000191818
8	YGR191W	9	8	24	6018.36	0.000191379
9	YLL029W	16	20	42	6015.65	0.000191293
10	YKR072C	3	8	18	6010.14	0.000191118
11	YNL161W	4	22	40	6008	0.00019105
12	YBR038W	12	21	49	5987.96	0.000190412
13	YOR145C	0	6	18	5986.15	0.000190355
14	YML110C	4	6	14	5985.92	0.000190348
15	YOL093W	3	6	23	5985.15	0.000190323
16	YDR221W	18	10	30	5981.63	0.000190211
17	YBR166C	7	13	9	5978.3	0.000190105
18	YML014W	4	9	21	5972.14	0.000189909
19	YPR023C	6	8	18	5966.94	0.000189744
20	YHR121W	1	2	7	5961.27	0.000189564
21	YPL116W	8	28	36	5955.96	0.000189395
22	YLR057W	7	11	36	5955.46	0.000189379
23	YDR330W	1	6	26	5946.73	0.000189101
24	YGL012W	12	15	12	5927.82	0.0001885
25	YLR113W	6	16	16	5920.67	0.000188273
26	YOR251C	4	7	10	5916.72	0.000188147
27	YDR047W	6	6	21	5907.9	0.000187867
28	YLR460C	4	8	10	5907.13	0.000187842
29	YJL082W	8	11	40	5907.09	0.000187841
30	YBL106C	14	22	41	5900.1	0.000187619
31	YLR187W	4	19	42	5883.79	0.0001871
32	YHR073W	6	29	55	5869.14	0.000186634
33	YMR075W	15	13	25	5860.34	0.000186354
34	YBL008W	13	20	40	5855.53	0.000186201
35	YCR092C	11	30	47	5853.69	0.000186143
36	YJL148W	1	7	6	5853.24	0.000186128
37	YMR315W	2	9	8	5852.98	0.00018612
38	YCR037C	11	13	25	5844.8	0.00018586
39	YNR008W	5	22	37	5837.63	0.000185632
40	YJL140W	1	6	13	5837.03	0.000185613
41	YDR513W	2	2	2	5826.1	0.000185265
42	YNL067W	1	5	11	5823.18	0.000185173
43	YMR231W	18	22	42	5821.76	0.000185127
44	YER145C	7	8	18	5816.39	0.000184957
45	YOR265W	0	1	4	5812.49	0.000184833
46	YDR138W	7	8	37	5812.15	0.000184822
47	YDL178W	3	11	20	5809.8	0.000184747
48	YJR059W	8	30	37	5806.2	0.000184633
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2	YDL101C	8	11	23	5805.86	0.000184622
3	YDR452W	5	13	33	5802.55	0.000184517
4	YPR062W	6	3	7	5796.89	0.000184337
5	YDL203C	11	7	18	5791.58	0.000184168
6	YLR144C	8	19	27	5789.14	0.00018409
7	YOL124C	3	7	26	5788.91	0.000184083
8	YAL041W	7	25	34	5786.14	0.000183995
9	YGR244C	5	8	18	5782.13	0.000183867
10	YKL032C	1	18	16	5780.15	0.000183804
11	YMR124W	0	13	52	5775.5	0.000183656
12	YMR237W	10	15	26	5767.22	0.000183393
13	YMR215W	6	3	11	5766.39	0.000183367
14	YHR207C	15	18	29	5763.46	0.000183273
15	YDR166C	14	11	33	5758.71	0.000183122
16	YMR054W	7	21	39	5758.16	0.000183105
17	YML096W	8	9	26	5757.41	0.000183081
18	YKR029C	13	19	41	5756.1	0.000183039
19	YLR138W	12	14	58	5751.66	0.000182898
20	YDL042C	11	17	19	5743.17	0.000182628
21	YER107C	9	9	19	5741.05	0.000182561
22	YNL224C	3	19	44	5726.15	0.000182087
23	YHR005C	8	5	26	5722.48	0.00018197
24	YPL154C	4	9	6	5721.31	0.000181933
25	YMR240C	4	11	25	5718.8	0.000181853
26	YMR162C	21	33	83	5718.15	0.000181833
27	YJL198W	10	12	20	5714.01	0.000181701
28	YLR181C	4	5	6	5710.05	0.000181575
29	YAL059W	0	0	15	5707.29	0.000181487
30	YDL073W	16	23	39	5702.2	0.000181325
31	YAL049C	4	9	6	5700.21	0.000181262
32	YNL004W	4	11	60	5700.11	0.000181259
33	YPR055W	7	24	34	5696.29	0.000181138
34	YDL064W	2	2	6	5690.15	0.000180942
35	YKL195W	8	6	13	5689.09	0.000180909
36	YIR008C	8	9	25	5688.8	0.000180899
37	YLR383W	11	14	76	5684.9	0.000180775
38	YDR176W	1	6	30	5684.19	0.000180753
39	YMR061W	8	5	30	5683.43	0.000180729
40	YNL312W	6	7	6	5677.03	0.000180525
41	YJL029C	7	9	32	5668.57	0.000180256
42	YEL017W	6	4	10	5667.82	0.000180232
43	YDR195W	3	10	17	5664.66	0.000180132
44	YIL010W	2	3	12	5661.32	0.000180026
45	YML117W	11	26	48	5658.59	0.000179939
46	YBL056W	14	12	15	5654.75	0.000179817
47	YBR130C	1	8	12	5640.5	0.000179363
48	YDR354W	5	17	6	5634.6	0.000179176
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2	YML012W	2	3	18	5632.49	0.000179109
3	YJL178C	8	3	7	5629.7	0.00017902
4	YDR358W	4	6	22	5629.26	0.000179006
5	YNR003C	3	5	7	5626.64	0.000178923
6	YBR069C	14	13	23	5625.2	0.000178877
7	YLR277C	10	23	33	5621.34	0.000178754
8	YKL204W	0	11	21	5618.57	0.000178666
9	YMR288W	12	26	52	5616.86	0.000178612
10	YOR233W	5	27	59	5616.68	0.000178606
11	YKR092C	0	1	9	5616.21	0.000178591
12	YKL040C	3	6	7	5611.73	0.000178449
13	YPL208W	7	8	19	5606.72	0.000178289
14	YOR093C	32	39	65	5605.99	0.000178266
15	YFL016C	10	16	23	5590.8	0.000177783
16	YGL213C	9	14	15	5589.69	0.000177748
17	YKR060W	4	6	16	5587.49	0.000177678
18	YLR015W	7	9	27	5584.61	0.000177586
19	YBR222C	5	12	22	5583.17	0.00017754
20	YMR183C	3	5	14	5580.31	0.000177449
21	YML063W	1	6	16	5570.68	0.000177143
22	YKL007W	2	6	10	5565.33	0.000176973
23	YCR052W	1	9	19	5562.61	0.000176887
24	YPL228W	2	10	24	5559.08	0.000176774
25	YBR108W	1	19	39	5555.48	0.00017666
26	YFR025C	8	16	10	5554.76	0.000176637
27	YIL145C	4	5	17	5552.42	0.000176563
28	YDR245W	5	7	26	5543.68	0.000176285
29	YDR021W	5	4	19	5539.02	0.000176136
30	YDR337W	2	2	28	5527.89	0.000175783
31	YBR053C	9	9	8	5525.69	0.000175713
32	YGR100W	10	16	50	5524.66	0.00017568
33	YER014W	7	7	24	5521.83	0.00017559
34	YPL030W	8	21	29	5519.8	0.000175525
35	YLR017W	6	11	15	5519.35	0.000175511
36	YKR014C	3	2	9	5518.68	0.00017549
37	YLR433C	10	12	26	5516.68	0.000175426
38	YDL117W	11	19	43	5514.22	0.000175348
39	YDR279W	3	7	10	5513.92	0.000175338
40	YOL005C	1	2	5	5511.76	0.00017527
41	YHR104W	6	11	10	5511.56	0.000175263
42	YGL065C	6	10	15	5504.38	0.000175035
43	YLL032C	9	16	29	5499.78	0.000174889
44	YPL263C	7	13	27	5490.8	0.000174603
45	YGL129C	1	9	14	5483.44	0.000174369
46	YNR013C	10	20	25	5476.16	0.000174138
47	YHR149C	4	19	29	5467.97	0.000173877
48	YDR217C	14	21	63	5465.7	0.000173805
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2	YDR515W	0	5	17	5460.09	0.000173627
3	YPL129W	0	5	9	5440.46	0.000173002
4	YHR170W	13	14	27	5433.58	0.000172784
5	YNL233W	3	16	45	5430.25	0.000172678
6	YGR207C	3	1	9	5426	0.000172543
7	YMR161W	0	3	16	5424.03	0.00017248
8	YFR024C-A	1	1	39	5421.68	0.000172405
9	YLR373C	9	22	38	5418.09	0.000172291
10	YDR280W	10	7	15	5412.21	0.000172104
11	YPR165W	7	1	10	5399.96	0.000171714
12	YKR006C	3	4	12	5397.1	0.000171624
13	YIL144W	2	16	33	5396.79	0.000171614
14	YNL079C	0	3	6	5395.84	0.000171583
15	YBR160W	4	7	20	5383.09	0.000171178
16	YNL278W	9	26	53	5379.91	0.000171077
17	YGR111W	6	13	14	5378.47	0.000171031
18	YPL187W	0	4	5	5375.18	0.000170926
19	YDR128W	26	30	55	5375.13	0.000170925
20	YML062C	1	5	17	5369.88	0.000170758
21	YNL131W	0	0	4	5365.58	0.000170621
22	YJR003C	6	12	15	5364.48	0.000170586
23	YHR076W	3	4	14	5361.73	0.000170499
24	YJL053W	4	7	20	5361.19	0.000170482
25	YPL180W	2	34	45	5361.07	0.000170478
26	YBR236C	5	6	29	5359.12	0.000170416
27	YDL002C	2	1	17	5358.3	0.00017039
28	YNL192W	16	22	52	5355.29	0.000170294
29	YDR518W	5	15	14	5353.73	0.000170244
30	YCR036W	4	6	12	5353.71	0.000170244
31	YMR301C	4	11	40	5351.92	0.000170187
32	YGR097W	7	32	37	5343.02	0.000169904
33	YDR312W	2	12	31	5339.85	0.000169803
34	YOR274W	7	11	25	5337.78	0.000169737
35	YMR296C	12	12	14	5335.2	0.000169655
36	YEL015W	7	8	22	5334.71	0.00016964
37	YLR024C	50	45	82	5333.9	0.000169614
38	YOR142W	3	6	9	5322.19	0.000169241
39	YDR272W	8	8	13	5321.46	0.000169218
40	YJR103W	8	19	28	5320.76	0.000169196
41	YDR372C	3	3	23	5314.7	0.000169003
42	YJR140C	19	38	70	5312.02	0.000168918
43	YJL125C	6	14	25	5311.59	0.000168904
44	YLR247C	30	43	84	5309.81	0.000168848
45	YGR232W	4	9	4	5308.84	0.000168817
46	YPR115W	13	18	47	5308.59	0.000168809
47	YJL154C	18	25	41	5307.79	0.000168784
48	YMR004W	3	9	31	5306.66	0.000168748
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2	YLR133W	6	8	30	5306.37	0.000168738
3	YGL073W	0	22	39	5305.52	0.000168711
4	YPR073C	4	6	3	5303.11	0.000168635
5	YHR009C	9	19	19	5299.59	0.000168523
6	YER007C-A	2	5	4	5297.78	0.000168465
7	YOR118W	6	13	20	5296.84	0.000168435
8	YJR051W	3	12	20	5288.3	0.000168164
9	YBR133C	12	24	36	5284.61	0.000168046
10	YLR108C	15	15	19	5281.31	0.000167941
11	YBR289W	4	18	45	5277.06	0.000167806
12	YLR262C	3	1	10	5271.62	0.000167633
13	YIL034C	2	7	13	5271	0.000167614
14	YOR160W	21	13	33	5270.48	0.000167597
15	YLR440C	8	15	21	5265.08	0.000167425
16	YIL123W	10	6	4	5263.21	0.000167366
17	YOL143C	1	6	7	5260.36	0.000167275
18	YPR018W	5	4	33	5259.29	0.000167241
19	YGL095C	5	11	31	5255.67	0.000167126
20	YBR281C	11	20	25	5250.83	0.000166972
21	YGR233C	13	30	38	5246.89	0.000166847
22	YCL044C	1	13	20	5241.74	0.000166683
23	YLR386W	13	15	37	5239.83	0.000166622
24	YMR102C	11	27	52	5239.03	0.000166597
25	YLR095C	12	20	41	5232.35	0.000166385
26	YGR276C	6	15	21	5227.95	0.000166245
27	YPL110C	14	37	55	5224.27	0.000166128
28	YPR029C	9	15	24	5215.66	0.000165854
29	YDR214W	3	6	9	5214.45	0.000165815
30	YOL087C	13	32	40	5205.56	0.000165533
31	YML079W	0	5	5	5193.57	0.000165151
32	YER022W	2	15	27	5184.74	0.000164871
33	YHR024C	6	11	19	5182.99	0.000164815
34	YFL049W	2	14	20	5182.58	0.000164802
35	YCR004C	3	4	5	5181.87	0.000164779
36	YNL119W	11	8	12	5180.5	0.000164736
37	YNL169C	5	12	29	5165.11	0.000164246
38	YIL036W	2	15	24	5147.86	0.000163698
39	YGL115W	4	4	17	5147.38	0.000163683
40	YDR056C	3	0	4	5143.45	0.000163558
41	YDR111C	8	10	23	5142.72	0.000163534
42	YHR132C	7	14	20	5141.57	0.000163498
43	YAL013W	6	10	20	5133.33	0.000163236
44	YGL189C	4	3	16	5133.18	0.000163231
45	YJL084C	4	35	48	5133.07	0.000163228
46	YKR086W	14	17	52	5117.96	0.000162747
47	YPR160W	5	19	40	5113.66	0.00016261
48	YPL143W	0	3	11	5113.52	0.000162606
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2	YDR006C	9	21	47	5109.19	0.000162468
3	YKR010C	5	15	34	5102.78	0.000162264
4	YPR122W	16	22	45	5102.78	0.000162264
5	YER099C	6	11	15	5101.25	0.000162216
6	YKR062W	3	4	15	5100.33	0.000162186
7	YER009W	0	2	5	5099.33	0.000162155
8	YLR074C	2	5	9	5098.99	0.000162144
9	YKL206C	4	2	8	5098.71	0.000162135
10	YDL078C	1	6	11	5097.71	0.000162103
11	YHR206W	5	19	23	5096.22	0.000162056
12	YLR219W	0	24	37	5095.81	0.000162043
13	YCR067C	2	17	25	5090.89	0.000161886
14	YIL124W	4	3	12	5085.18	0.000161705
15	YGL068W	0	1	5	5074.89	0.000161377
16	YDR261C	6	11	12	5073.94	0.000161347
17	YHR003C	9	9	24	5070.59	0.000161241
18	YNL272C	9	11	29	5066.55	0.000161112
19	YGR277C	8	11	13	5063.49	0.000161015
20	YER078C	7	12	28	5062.38	0.00016098
21	YDL235C	1	2	6	5059.68	0.000160894
22	YGR158C	5	4	10	5058.4	0.000160853
23	YKR036C	7	19	30	5055.27	0.000160754
24	YCR051W	1	6	14	5052.25	0.000160658
25	YPL001W	2	6	19	5045.13	0.000160431
26	YFR019W	26	60	106	5043.32	0.000160374
27	YNL023C	92	32	48	5039.87	0.000160264
28	YBR001C	7	18	46	5038.02	0.000160205
29	YLR257W	1	4	21	5033.24	0.000160053
30	YOR123C	2	8	33	5032.95	0.000160044
31	YMR165C	3	14	38	5031.71	0.000160004
32	YBL033C	7	11	25	5022.8	0.000159721
33	YGL100W	8	11	15	5020.76	0.000159656
34	YGL039W	9	5	6	5015.15	0.000159478
35	YDL027C	3	5	17	5014.43	0.000159455
36	YLR221C	0	2	9	5009.91	0.000159311
37	YBR097W	29	26	62	5002.95	0.00015909
38	YGL107C	5	13	32	4995.98	0.000158868
39	YDR379W	21	28	54	4995.16	0.000158842
40	YLR185W	4	5	11	4994.23	0.000158813
41	YDR147W	11	14	17	4992.36	0.000158753
42	YDR484W	6	9	24	4992.13	0.000158746
43	YPL004C	0	7	17	4985.92	0.000158548
44	YBL088C	49	47	109	4985.44	0.000158533
45	YOR191W	22	30	83	4981.83	0.000158418
46	YKL106W	8	9	18	4979.06	0.00015833
47	YHR133C	4	4	7	4976.12	0.000158237
48	YLR351C	3	8	13	4975.1	0.000158204
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2	YKR021W	4	27	33	4974.58	0.000158188
3	YGL130W	8	8	23	4972.81	0.000158131
4	YGL038C	1	11	18	4972.76	0.00015813
5	YJL165C	15	31	43	4968.17	0.000157984
6	YKR068C	6	2	7	4965.67	0.000157904
7	YLR025W	0	3	8	4965.3	0.000157893
8	YBR026C	2	5	10	4963.34	0.00015783
9	YOR095C	2	5	11	4962.95	0.000157818
10	YPL215W	2	6	22	4962.51	0.000157804
11	YIL047C	16	20	54	4962.46	0.000157802
12	YGR117C	5	10	16	4960.61	0.000157743
13	YPL125W	14	17	48	4959.9	0.000157721
14	YBR056W	4	18	15	4957.84	0.000157655
15	YMR272C	7	21	10	4955.42	0.000157578
16	YGR165W	1	9	24	4952.62	0.000157489
17	YML091C	16	22	35	4948.71	0.000157365
18	YCL009C	6	10	21	4945.81	0.000157273
19	YNL026W	6	19	17	4945.41	0.00015726
20	YOR042W	0	10	28	4941.51	0.000157136
21	YGL185C	11	14	22	4940.43	0.000157102
22	YNL155W	8	8	15	4940.32	0.000157098
23	YJL011C	1	3	6	4933.21	0.000156872
24	YML025C	0	5	21	4929.06	0.00015674
25	YBR087W	9	7	20	4923.49	0.000156563
26	YJL002C	2	11	13	4923	0.000156548
27	YPL139C	6	10	8	4922.88	0.000156544
28	YGR140W	11	25	40	4920.01	0.000156452
29	YDR348C	0	15	38	4915.95	0.000156323
30	YLR285W	1	12	5	4914.96	0.000156292
31	YJL085W	5	9	25	4911.57	0.000156184
32	YHR119W	13	34	70	4911.15	0.000156171
33	YMR311C	1	6	10	4910.14	0.000156139
34	YKL005C	10	14	25	4909.17	0.000156108
35	YEL001C	1	3	4	4908.53	0.000156087
36	YLR348C	3	4	15	4906.67	0.000156028
37	YDL205C	8	8	15	4905.34	0.000155986
38	YFR028C	7	18	31	4904.44	0.000155957
39	YLR189C	6	26	55	4904.22	0.00015595
40	YGR152C	2	2	15	4901.49	0.000155864
41	YGL153W	0	1	12	4900.76	0.00015584
42	YDL063C	8	9	20	4898.33	0.000155763
43	YKL057C	18	27	35	4898.13	0.000155757
44	YCL017C	6	16	29	4894.82	0.000155651
45	YLR369W	1	4	29	4893.9	0.000155622
46	YML034W	11	11	43	4891.47	0.000155545
47	YOR283W	3	11	15	4885.91	0.000155368
48	YPL122C	2	9	17	4884.04	0.000155309
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2	YGL241W	17	12	28	4879.52	0.000155165
3	YOL038W	4	4	16	4871.3	0.000154903
4	YBR200W	4	7	19	4863.36	0.000154651
5	YFR005C	10	19	17	4857.78	0.000154474
6	YOL010W	4	5	16	4846.1	0.000154102
7	YGR177C	8	16	23	4844.79	0.00015406
8	YJR017C	2	8	14	4838.84	0.000153871
9	YKR023W	8	14	26	4837.43	0.000153826
10	YOR074C	5	7	18	4837.23	0.00015382
11	YKR074W	0	5	7	4833.83	0.000153712
12	YJR024C	9	9	4	4832.42	0.000153667
13	YIL044C	5	8	9	4829.4	0.000153571
14	YOL018C	3	10	24	4829.4	0.000153571
15	YCR054C	14	9	23	4829.37	0.00015357
16	YOL100W	5	19	47	4819.24	0.000153248
17	YFL024C	5	22	55	4815.48	0.000153128
18	YBL054W	3	28	28	4814.52	0.000153098
19	YPL153C	10	15	35	4813.03	0.000153051
20	YML124C	11	11	21	4810.53	0.000152971
21	YJL036W	3	11	19	4807.91	0.000152888
22	YER087W	15	13	28	4806.34	0.000152838
23	YOR112W	9	5	28	4801.11	0.000152672
24	YGR255C	3	9	26	4799.09	0.000152607
25	YLR203C	4	17	25	4798.58	0.000152591
26	YJR065C	5	6	21	4795.97	0.000152508
27	YOL066C	13	18	34	4790.92	0.000152347
28	YKL027W	5	5	24	4788.34	0.000152265
29	YHR069C	3	7	20	4786.52	0.000152208
30	YDR347W	3	3	20	4784.67	0.000152149
31	YER148W	2	2	15	4783.49	0.000152111
32	YDR103W	16	20	41	4779.95	0.000151999
33	YGL062W	12	29	66	4777.58	0.000151923
34	YCL061C	1	26	45	4775.38	0.000151853
35	YOR197W	3	7	15	4770.95	0.000151712
36	YNL127W	13	24	45	4768.52	0.000151635
37	YDL053C	1	2	8	4767.52	0.000151603
38	YCL035C	2	3	3	4763.12	0.000151463
39	YNL021W	14	20	32	4762.71	0.00015145
40	YPR143W	0	3	12	4759.16	0.000151338
41	YLR115W	10	12	34	4750.35	0.000151057
42	YKR079C	8	27	29	4747.21	0.000150958
43	YJL122W	0	3	9	4741.15	0.000150765
44	YAL053W	10	5	27	4739.65	0.000150717
45	YHR082C	6	38	44	4738.06	0.000150667
46	YFL017C	4	2	5	4736.83	0.000150627
47	YDL047W	10	9	14	4736.2	0.000150607
48	YBL067C	16	14	28	4736.17	0.000150606
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2	YPR141C	5	21	33	4729.44	0.000150392
3	YOR275C	6	7	25	4728.66	0.000150368
4	YJL208C	6	7	17	4723.26	0.000150196
5	YJL189W	0	0	9	4720.96	0.000150123
6	YKL150W	1	10	7	4718.23	0.000150036
7	YKR089C	9	23	51	4711.62	0.000149826
8	YBR272C	6	4	22	4710.47	0.000149789
9	YBR216C	14	6	22	4707.49	0.000149694
10	YMR167W	9	12	40	4701.31	0.000149498
11	YML082W	12	16	32	4699.24	0.000149432
12	YAL025C	6	7	20	4698.43	0.000149406
13	YOL130W	11	25	46	4695.63	0.000149317
14	YJL092W	8	25	69	4694.83	0.000149292
15	YEL061C	9	19	34	4694.64	0.000149286
16	YML031W	8	13	32	4684.84	0.000148974
17	YDR298C	1	3	7	4675.36	0.000148673
18	YKL017C	6	13	33	4673.82	0.000148624
19	YKL028W	4	7	22	4673.21	0.000148604
20	YDR206W	6	13	26	4672.89	0.000148594
21	YBL028C	0	3	9	4672.65	0.000148587
22	YDR164C	5	18	37	4668.96	0.000148469
23	YER029C	1	3	17	4666.25	0.000148383
24	YBR068C	10	11	22	4663.03	0.000148281
25	YLR199C	6	2	4	4658.53	0.000148138
26	YDR159W	13	31	60	4655.68	0.000148047
27	YER016W	4	8	15	4652.52	0.000147946
28	YDL134C	9	12	16	4646.38	0.000147751
29	YNL225C	7	13	28	4637.29	0.000147462
30	YDL003W	2	5	27	4635.21	0.000147396
31	YOR354C	8	13	29	4633.37	0.000147338
32	YOR236W	3	3	11	4631.05	0.000147264
33	YPL274W	15	6	21	4626.52	0.00014712
34	YLR163C	1	9	23	4626.21	0.00014711
35	YDR289C	1	12	15	4625.24	0.000147079
36	YOR287C	0	7	24	4620.86	0.00014694
37	YPR144C	3	15	15	4619.25	0.000146889
38	YDR257C	16	2	25	4614.06	0.000146723
39	YKL085W	1	8	12	4607.22	0.000146506
40	YPL259C	5	9	17	4606.44	0.000146481
41	YDL192W	1	2	12	4605.64	0.000146456
42	YMR115W	5	9	27	4599.85	0.000146272
43	YPR191W	1	3	16	4598.67	0.000146234
44	YKL016C	0	2	7	4597.68	0.000146203
45	YML057W	10	21	28	4595.3	0.000146127
46	YKL078W	13	10	47	4588.09	0.000145898
47	YML067C	4	3	12	4587.66	0.000145884
48	YNL180C	6	7	11	4564.84	0.000145158
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2	YIL116W	9	5	14	4560.27	0.000145013
3	YHR127W	0	6	19	4557.22	0.000144916
4	YGR081C	0	1	17	4555.44	0.000144859
5	YNL068C	2	16	31	4552.28	0.000144759
6	YBR039W	2	4	14	4551.32	0.000144728
7	YMR067C	2	11	13	4547.33	0.000144602
8	YMR016C	2	10	22	4546.62	0.000144579
9	YJR091C	8	32	35	4543.07	0.000144466
10	YDL056W	1	22	40	4540.7	0.000144391
11	YER132C	15	39	94	4540.26	0.000144377
12	YGL221C	6	8	10	4538.82	0.000144331
13	YJR062C	7	6	12	4537.85	0.0001443
14	YLR455W	4	6	21	4534.3	0.000144187
15	YGL164C	0	2	21	4534.02	0.000144178
16	YBL055C	9	11	14	4529.32	0.000144029
17	YMR276W	0	5	13	4524.1	0.000143863
18	YPL249C-A	0	1	12	4522.78	0.000143821
19	YPR016C	4	4	13	4520.78	0.000143757
20	YHR045W	9	6	20	4516.2	0.000143612
21	YGR284C	3	2	9	4515.31	0.000143583
22	YFL001W	9	8	25	4514.67	0.000143563
23	YIL110W	4	5	14	4514.63	0.000143562
24	YOR219C	0	23	36	4508.45	0.000143365
25	YGR003W	10	15	30	4506.65	0.000143308
26	YGL083W	8	13	21	4504.75	0.000143247
27	YPR164W	26	27	60	4502.8	0.000143185
28	YDR033W	10	6	9	4498.72	0.000143056
29	YBR244W	4	0	1	4498.15	0.000143038
30	YCR069W	4	11	9	4497.99	0.000143033
31	YKL033W- <i>Δ</i>	4	7	5	4497.62	0.000143021
32	YGL223C	5	10	12	4495.64	0.000142958
33	YKL103C	5	14	18	4488.37	0.000142727
34	YBR159W	5	5	17	4481.41	0.000142505
35	YDL189W	4	6	26	4481.07	0.000142494
36	YAL054C	7	20	30	4478.07	0.000142399
37	YIL074C	4	12	16	4476.67	0.000142355
38	YNL172W	20	32	72	4475.73	0.000142325
39	YMR024W	5	9	20	4470.86	0.00014217
40	YGL172W	2	5	6	4468.15	0.000142084
41	YOR122C	1	3	5	4466.02	0.000142016
42	YOR252W	1	5	16	4463	0.00014192
43	YOR291W	24	29	71	4455.01	0.000141666
44	YPL101W	0	14	28	4454.21	0.00014164
45	YPL020C	5	9	45	4449.07	0.000141477
46	YGR019W	8	12	17	4441.66	0.000141241
47	YGR267C	3	8	19	4437.22	0.0001411
48	YER111C	7	23	30	4436.99	0.000141093
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2	YNL208W	0	5	7	4429.73	0.000140862
3	YPL111W	6	10	8	4424.42	0.000140693
4	YDR207C	9	21	46	4422.56	0.000140634
5	YBR003W	5	15	28	4421.49	0.0001406
6	YHR120W	14	18	53	4416.44	0.000140439
7	YNR067C	2	14	16	4412.96	0.000140329
8	YDR051C	5	12	30	4412.45	0.000140312
9	YKL105C	5	29	56	4411.3	0.000140276
10	YGL181W	5	7	27	4409.77	0.000140227
11	YJL201W	3	7	26	4405.2	0.000140082
12	YOR220W	2	4	8	4404.84	0.00014007
13	YJR034W	7	1	5	4401.03	0.000139949
14	YMR014W	4	8	28	4400.84	0.000139943
15	R0020C	7	12	20	4400.28	0.000139925
16	YFR040W	5	20	38	4399.95	0.000139915
17	YMR074C	0	1	9	4398.22	0.00013986
18	YLR143W	15	20	26	4387.67	0.000139524
19	YJL157C	15	19	32	4387.36	0.000139515
20	YPL050C	1	16	16	4385.14	0.000139444
21	YMR241W	3	3	14	4385.06	0.000139441
22	YDR485C	3	11	40	4380.71	0.000139303
23	YNL062C	4	13	16	4378.35	0.000139228
24	YDR239C	1	20	37	4374.61	0.000139109
25	YNL129W	3	5	7	4373.87	0.000139086
26	YDL165W	2	4	11	4371.63	0.000139014
27	YNL232W	5	1	18	4371.5	0.00013901
28	YOR280C	2	7	10	4362.93	0.000138738
29	YNR029C	7	8	18	4362.59	0.000138727
30	YER063W	0	1	14	4357.07	0.000138551
31	YGL001C	5	10	11	4356.22	0.000138524
32	YKL120W	3	5	10	4346.92	0.000138229
33	YDR044W	3	12	21	4346.36	0.000138211
34	YOR132W	1	7	38	4336.56	0.000137899
35	YNL044W	2	1	3	4333.45	0.0001378
36	YCR032W	32	42	76	4331.96	0.000137753
37	YGR002C	2	8	24	4325.56	0.000137549
38	YPR028W	0	2	5	4324.12	0.000137504
39	YAL024C	9	30	67	4324.08	0.000137502
40	YMR285C	10	19	26	4323.05	0.00013747
41	YGR093W	9	11	18	4319.19	0.000137347
42	YBL097W	5	16	35	4314.9	0.00013721
43	YHR172W	9	14	47	4312.64	0.000137139
44	YLR272C	23	17	40	4312.52	0.000137135
45	YHR025W	8	4	17	4311.64	0.000137107
46	YOR347C	5	11	29	4311.23	0.000137094
47	YGR048W	2	2	11	4302.83	0.000136827
48	YBL045C	1	9	15	4302.21	0.000136807
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2	YGL233W	7	10	30	4301.98	0.0001368
3	YHL020C	4	8	16	4301.31	0.000136778
4	YLR225C	7	6	12	4293.61	0.000136533
5	YOR138C	10	12	24	4289.83	0.000136413
6	YKL041W	0	0	19	4285.8	0.000136285
7	YJR144W	7	5	13	4284.06	0.00013623
8	YKL045W	8	14	30	4282.44	0.000136178
9	YER004W	2	5	13	4279.79	0.000136094
10	YGR068C	6	15	30	4273.95	0.000135908
11	YDR516C	9	13	28	4272.01	0.000135847
12	YFR032C-A	0	6	4	4268.33	0.00013573
13	YNL181W	5	2	23	4266.49	0.000135671
14	YDR389W	1	16	47	4264.09	0.000135595
15	YJL069C	6	17	20	4263.61	0.000135579
16	YDR177W	1	6	8	4261.94	0.000135526
17	YNL209W	2	5	29	4258.8	0.000135426
18	YFR050C	0	3	13	4257.28	0.000135378
19	YER103W	2	5	28	4252.25	0.000135218
20	YGL037C	2	12	7	4249.54	0.000135132
21	YBL016W	6	12	21	4249.38	0.000135127
22	YJR050W	1	7	17	4248.62	0.000135103
23	YEL056W	2	15	12	4248.3	0.000135093
24	YAL060W	11	17	8	4246.98	0.000135051
25	YDR228C	10	14	19	4241.73	0.000134884
26	YGL066W	7	18	31	4239.3	0.000134806
27	YJL158C	6	1	3	4237.14	0.000134738
28	YKL082C	0	2	32	4236.95	0.000134732
29	YCR008W	16	18	29	4235.37	0.000134681
30	YER123W	13	18	31	4230.26	0.000134519
31	YPL053C	7	9	17	4230.17	0.000134516
32	YNR047W	8	32	50	4225.83	0.000134378
33	YDR473C	5	14	35	4224.93	0.000134349
34	YKR009C	6	18	28	4223.23	0.000134295
35	YBL042C	11	5	21	4218.39	0.000134141
36	YHR188C	8	13	25	4215.4	0.000134046
37	YBR237W	9	14	41	4209.65	0.000133864
38	YLR072W	8	12	32	4209.15	0.000133848
39	YLR207W	7	22	41	4208.13	0.000133815
40	YGR271C-A	1	2	16	4208.03	0.000133812
41	YFR039C	6	12	17	4208.02	0.000133812
42	YDR495C	16	19	30	4206.97	0.000133778
43	YIL021W	7	5	8	4206.74	0.000133771
44	YNR026C	3	11	10	4205.65	0.000133736
45	YBR264C	4	3	5	4203.5	0.000133668
46	YOR373W	7	23	23	4202.65	0.000133641
47	YDR466W	5	23	40	4201.88	0.000133616
48	YDL077C	17	30	47	4201.67	0.00013361
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2	YHR066W	2	12	30	4199.41	0.000133538
3	YJR025C	5	6	7	4197.87	0.000133489
4	YBL051C	1	16	21	4196.14	0.000133434
5	YJL171C	9	6	7	4195.83	0.000133424
6	YJR043C	5	4	15	4195.83	0.000133424
7	YNR019W	8	14	22	4195.67	0.000133419
8	YLR378C	3	1	19	4193.66	0.000133355
9	YMR209C	6	14	22	4193.31	0.000133344
10	YBR151W	9	9	15	4191.1	0.000133274
11	YNL229C	0	11	19	4189.47	0.000133222
12	YKL189W	7	7	15	4187.72	0.000133166
13	YDR027C	10	20	47	4181.29	0.000132962
14	YML081W	20	42	52	4180.98	0.000132952
15	YNL246W	2	5	10	4176.99	0.000132825
16	YER065C	6	17	26	4176.9	0.000132822
17	YKL148C	11	26	39	4176.77	0.000132818
18	YDR460W	8	4	22	4176.63	0.000132814
19	YBR255W	1	26	47	4175.3	0.000132771
20	YJR014W	5	2	9	4171.31	0.000132644
21	YOR174W	2	3	10	4170.74	0.000132626
22	YOR136W	3	7	18	4166.31	0.000132485
23	YGR037C	0	0	1	4166	0.000132476
24	YNL242W	15	31	49	4164.7	0.000132434
25	YLR292C	3	2	9	4162.17	0.000132354
26	YML004C	7	13	12	4160.18	0.00013229
27	YCR002C	1	8	22	4160.05	0.000132286
28	YPR139C	5	2	11	4157.15	0.000132194
29	YBR234C	10	11	13	4155.55	0.000132143
30	YIL147C	7	20	57	4154.9	0.000132123
31	YDL130W	0	1	0	4153.98	0.000132093
32	YOR164C	2	7	9	4142.75	0.000131736
33	YHR181W	4	3	12	4139.4	0.00013163
34	YJL110C	10	16	29	4135.99	0.000131521
35	YPL118W	0	6	22	4132.86	0.000131422
36	YKL025C	9	12	17	4129.31	0.000131309
37	YLL058W	11	6	25	4128.8	0.000131293
38	YBR110W	7	11	16	4124.43	0.000131154
39	YGL023C	8	18	34	4123.08	0.000131111
40	YIL131C	4	8	26	4120.58	0.000131031
41	YCL039W	11	23	26	4114.06	0.000130824
42	YNR033W	16	17	23	4113.04	0.000130791
43	YGL196W	13	11	15	4112.16	0.000130763
44	YGL060W	12	14	18	4108.93	0.000130661
45	YER027C	1	15	11	4106.81	0.000130593
46	YOL031C	4	11	20	4105.23	0.000130543
47	YOR285W	1	5	4	4102.79	0.000130465
48	YJR131W	5	18	24	4102.57	0.000130458
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2	YIL143C	10	20	49	4098.07	0.000130315
3	YJR001W	14	8	28	4095.84	0.000130244
4	YOR227W	9	33	60	4094.27	0.000130195
5	YGL169W	5	9	21	4088.71	0.000130018
6	YGR169C-A	0	1	9	4087.05	0.000129965
7	YGR280C	1	9	16	4083.29	0.000129845
8	YDR081C	10	19	31	4081.7	0.000129795
9	YGL040C	9	9	21	4080.48	0.000129756
10	YGR231C	1	3	27	4079.89	0.000129737
11	YEL040W	12	6	6	4076.38	0.000129626
12	YBR251W	2	9	19	4074.33	0.00012956
13	YGR092W	6	11	40	4071.65	0.000129475
14	YDR244W	6	10	22	4068.1	0.000129362
15	YIL118W	8	3	8	4068.01	0.00012936
16	YPR042C	12	19	45	4063.24	0.000129208
17	YBL003C	0	3	10	4062.81	0.000129194
18	YHR111W	13	8	25	4060.36	0.000129116
19	YDR490C	5	14	38	4058.61	0.000129061
20	YLR182W	6	18	25	4058.6	0.00012906
21	YDR119W	17	15	26	4054.33	0.000128924
22	YOR196C	10	5	33	4052.79	0.000128876
23	YCL029C	4	15	25	4049.81	0.000128781
24	YDL036C	7	14	33	4049.61	0.000128774
25	YNL330C	10	14	21	4048.5	0.000128739
26	YGR082W	0	1	9	4044.71	0.000128619
27	YGL110C	3	16	37	4042.83	0.000128559
28	YKL067W	1	3	8	4038.01	0.000128406
29	YOR320C	4	9	18	4037.53	0.00012839
30	YNR006W	10	12	33	4036.44	0.000128356
31	YML061C	6	17	50	4035.27	0.000128318
32	YGL050W	5	2	15	4020.99	0.000127864
33	YGR078C	3	2	9	4007.66	0.00012744
34	YDL198C	1	5	16	4007.49	0.000127435
35	YJL049W	0	9	28	4006.07	0.00012739
36	YHL003C	5	9	20	4003.69	0.000127314
37	YDR148C	1	4	22	3998.91	0.000127162
38	YGR208W	8	4	6	3995.47	0.000127053
39	YLR087C	30	68	115	3993.53	0.000126991
40	YGR033C	1	7	17	3991.26	0.000126919
41	YDR020C	2	4	11	3991.14	0.000126915
42	YJR090C	21	25	72	3989.83	0.000126873
43	YMR305C	5	4	5	3979.3	0.000126539
44	YOL002C	9	11	12	3972.88	0.000126334
45	YNR011C	13	14	50	3972.08	0.000126309
46	YNL284C	0	6	22	3956.69	0.00012582
47	YGR017W	8	6	14	3953.3	0.000125712
48	YDR519W	2	1	5	3951.27	0.000125647
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2	YDL099W	0	1	9	3945.94	0.000125478
3	YPR162C	6	6	29	3945.37	0.00012546
4	YGR080W	2	4	13	3942.7	0.000125375
5	YBR274W	10	13	20	3941.42	0.000125334
6	YLR033W	5	6	24	3937.69	0.000125215
7	YJR133W	2	7	10	3932.77	0.000125059
8	YKL191W	8	17	19	3923.08	0.000124751
9	YKL088W	2	13	24	3917.76	0.000124582
10	YJL047C	13	23	39	3914.09	0.000124465
11	YBL069W	5	11	12	3907.85	0.000124267
12	YIR036C	4	3	13	3906.74	0.000124231
13	YDR088C	3	9	27	3901.46	0.000124063
14	YBR046C	2	2	9	3896.25	0.000123898
15	YPR089W	10	22	30	3895.77	0.000123882
16	YER169W	10	25	30	3891.81	0.000123756
17	YER152C	6	10	24	3891.8	0.000123756
18	YKL059C	8	6	24	3889.07	0.000123669
19	YDL113C	2	16	28	3885.78	0.000123565
20	YPR070W	7	10	16	3885.33	0.00012355
21	YGR252W	3	9	22	3884.31	0.000123518
22	YOR353C	9	19	24	3883.04	0.000123478
23	YKR026C	3	6	16	3879.77	0.000123374
24	YDR061W	9	14	25	3878.02	0.000123318
25	YDL182W	8	11	19	3877.92	0.000123315
26	YHL004W	0	6	23	3877.35	0.000123297
27	YIL107C	4	17	49	3873.39	0.000123171
28	YML115C	3	14	27	3872.77	0.000123151
29	YLR119W	1	6	12	3872.01	0.000123127
30	YOR155C	4	10	31	3864.1	0.000122875
31	YJR077C	3	2	7	3863.05	0.000122842
32	YHR043C	3	3	7	3858.19	0.000122687
33	YKL069W	6	6	0	3856.93	0.000122647
34	YJR075W	1	13	20	3855.82	0.000122612
35	YLR324W	1	4	27	3847.22	0.000122339
36	YKL197C	16	24	42	3845.1	0.000122271
37	YER048W-1	0	1	8	3842.98	0.000122204
38	YMR213W	3	9	35	3841.46	0.000122155
39	YMR297W	12	11	11	3838.33	0.000122056
40	YOR110W	4	7	20	3836.73	0.000122005
41	YNL239W	3	7	19	3836.13	0.000121986
42	YDL072C	2	1	10	3833.3	0.000121896
43	YKL140W	6	19	24	3829.76	0.000121783
44	YOL034W	9	22	62	3829.27	0.000121768
45	YJL030W	2	4	7	3821.85	0.000121532
46	YLR018C	1	12	12	3818.23	0.000121417
47	YMR295C	1	5	12	3813.72	0.000121273
48	YPR049C	6	19	46	3812.57	0.000121237
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2	YMR110C	7	11	20	3808.87	0.000121119
3	YJL115W	2	3	10	3808.47	0.000121106
4	YDL166C	4	6	10	3804.77	0.000120989
5	YDR121W	1	4	7	3803.6	0.000120951
6	YPR022C	18	30	49	3801.74	0.000120892
7	YAL007C	2	1	6	3796.52	0.000120726
8	YMR203W	4	4	10	3793.94	0.000120644
9	YIL076W	2	5	2	3793.23	0.000120622
10	YBR171W	3	2	10	3790.62	0.000120539
11	YNR012W	8	12	24	3789.21	0.000120494
12	YDR498C	5	9	16	3784.86	0.000120356
13	YLR388W	4	3	8	3771.81	0.000119941
14	YOR321W	11	22	31	3770.62	0.000119903
15	YIR012W	11	12	5	3765.45	0.000119738
16	YNR074C	3	5	15	3764.21	0.000119699
17	YML032C	2	7	26	3751.41	0.000119292
18	YOR017W	6	25	57	3749.31	0.000119225
19	YFL033C	15	45	79	3744.5	0.000119072
20	YJL203W	2	5	18	3743.82	0.000119051
21	YBR139W	11	12	19	3743.11	0.000119028
22	YAR014C	3	16	25	3741.68	0.000118982
23	YHR200W	1	6	14	3741.14	0.000118965
24	YGL021W	6	21	38	3736.18	0.000118808
25	YNL108C	3	6	12	3734.64	0.000118759
26	YKL063C	1	2	6	3734.46	0.000118753
27	YIL103W	7	11	21	3734.21	0.000118745
28	YDR174W	0	5	8	3734.09	0.000118741
29	YBR125C	7	15	19	3733.57	0.000118725
30	YBR215W	0	8	15	3732.9	0.000118703
31	YOR357C	2	7	11	3732.9	0.000118703
32	YDL209C	6	5	19	3730.98	0.000118642
33	YDR096W	13	20	30	3729.1	0.000118582
34	YGL141W	9	17	44	3728.37	0.000118559
35	YMR220W	6	15	22	3726.93	0.000118513
36	YNL051W	2	4	12	3719.47	0.000118276
37	YNL206C	3	4	13	3718.96	0.00011826
38	YOR096W	0	4	13	3718.62	0.000118249
39	YOR140W	3	22	24	3713.73	0.000118094
40	YKR038C	10	10	19	3708.22	0.000117918
41	YNL111C	0	3	2	3707.95	0.00011791
42	YOL023W	10	15	26	3707.47	0.000117895
43	YML016C	12	24	35	3704.33	0.000117795
44	YDL015C	3	9	12	3702.16	0.000117726
45	YIR034C	4	11	22	3701.88	0.000117717
46	YLR418C	3	10	20	3701.62	0.000117709
47	YOL062C	5	15	25	3698.43	0.000117607
48	YHR118C	11	7	27	3696.37	0.000117542
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2	YDR453C	2	2	6	3690.16	0.000117344
3	YMR060C	5	4	12	3689.17	0.000117313
4	YGR136W	0	0	6	3686.4	0.000117225
5	YDR440W	10	10	29	3685.81	0.000117206
6	YHL002W	2	10	20	3682.92	0.000117114
7	YNR015W	10	11	19	3674.57	0.000116848
8	YDR328C	1	4	13	3674.52	0.000116847
9	YLR321C	3	13	23	3669.46	0.000116686
10	YDL175C	15	15	24	3668.61	0.000116659
11	YEL038W	1	4	5	3665.97	0.000116575
12	YER133W	12	4	19	3664.8	0.000116538
13	YJL117W	1	6	14	3662.62	0.000116468
14	YHR072W	15	20	31	3657.56	0.000116308
15	YBR273C	4	14	34	3653.69	0.000116184
16	YPR004C	6	3	9	3653.61	0.000116182
17	YGL077C	16	14	12	3650.65	0.000116088
18	YJR076C	3	8	31	3650.46	0.000116082
19	YOR377W	14	17	23	3646.7	0.000115962
20	YJL141C	13	19	34	3645.9	0.000115937
21	YOL060C	6	26	23	3642.87	0.00011584
22	YKL139W	6	11	28	3642.59	0.000115831
23	YOL125W	17	12	27	3632.67	0.000115516
24	YPL128C	6	11	23	3628.55	0.000115385
25	YFR014C	5	8	16	3623.12	0.000115212
26	YPL232W	1	8	15	3618.68	0.000115071
27	YIL095W	6	20	50	3616.82	0.000115012
28	YDR032C	1	6	4	3616.13	0.00011499
29	YER143W	3	3	22	3613.4	0.000114903
30	YGR202C	4	7	28	3612.5	0.000114875
31	YGR072W	4	4	21	3605.62	0.000114656
32	YOR094W	1	1	5	3604.83	0.000114631
33	YGR238C	9	22	39	3601.78	0.000114534
34	YKR016W	10	6	23	3600.9	0.000114506
35	YMR277W	9	16	25	3599.81	0.000114471
36	YPR095C	16	27	53	3598.75	0.000114437
37	YPL138C	18	9	20	3593.19	0.000114261
38	YNL027W	7	15	34	3592.51	0.000114239
39	YCR094W	6	8	14	3591.35	0.000114202
40	YKL166C	4	11	17	3588.84	0.000114122
41	YEL043W	5	22	27	3588.62	0.000114115
42	YGR089W	10	25	32	3588.07	0.000114098
43	YDR376W	5	10	26	3587.42	0.000114077
44	YJR040W	14	13	31	3585.28	0.000114009
45	YBR052C	3	4	4	3584.01	0.000113969
46	YKR080W	6	5	12	3581.95	0.000113903
47	YLR260W	13	17	37	3579.72	0.000113832
48	YDL030W	7	12	36	3576.32	0.000113724
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2	YPL173W	1	5	17	3574.14	0.000113655
3	YLR406C	0	3	11	3573.01	0.000113619
4	YNL265C	4	6	12	3567.79	0.000113453
5	YGR241C	1	14	19	3563.18	0.000113306
6	YIL062C	0	1	10	3561.38	0.000113249
7	YJR142W	3	6	15	3561.32	0.000113247
8	YJR096W	6	8	11	3560.62	0.000113225
9	YDR036C	8	6	21	3555.93	0.000113076
10	YKL047W	8	13	15	3555.53	0.000113063
11	YGR099W	7	14	35	3555.37	0.000113058
12	YDL219W	1	3	3	3553.56	0.000113
13	YDR202C	9	6	14	3552.8	0.000112976
14	YIL002C	10	18	44	3552.44	0.000112965
15	YNL076W	2	14	32	3550.94	0.000112917
16	YBL015W	4	20	26	3545.54	0.000112745
17	YHL009C	7	5	16	3544.83	0.000112723
18	YKL012W	1	12	37	3542.41	0.000112646
19	YMR149W	2	5	8	3537.02	0.000112474
20	YER093C	15	27	76	3532.2	0.000112321
21	YJR006W	11	5	19	3530.35	0.000112262
22	YJL104W	1	1	8	3529.14	0.000112224
23	YDL111C	1	7	7	3528.93	0.000112217
24	YHR115C	10	12	20	3527.78	0.000112181
25	YBR238C	8	37	29	3526.75	0.000112148
26	YLR009W	5	3	26	3526.45	0.000112138
27	YDR539W	11	15	14	3524.6	0.000112079
28	YOR038C	13	8	33	3524.17	0.000112066
29	YMR152W	3	8	9	3521.43	0.000111979
30	YLR078C	0	4	10	3518.94	0.0001119
31	YMR134W	4	7	13	3513.86	0.000111738
32	YGR132C	0	4	15	3511.34	0.000111658
33	YDL224C	6	20	23	3510.02	0.000111616
34	YNL306W	2	3	12	3504.84	0.000111451
35	YHR164C	25	21	73	3487.71	0.000110906
36	YOL094C	3	10	16	3487.45	0.000110898
37	YKR035W-/	1	0	11	3486.36	0.000110863
38	R0040C	2	1	25	3484.83	0.000110815
39	YGR250C	5	20	26	3479.74	0.000110653
40	YBR162C	12	8	8	3479.07	0.000110632
41	YIR037W	3	1	3	3479.06	0.000110631
42	YKL077W	2	8	20	3478.77	0.000110622
43	YPL112C	4	8	15	3475.34	0.000110513
44	YBL057C	4	4	7	3474.99	0.000110502
45	YMR130W	2	7	12	3474.85	0.000110497
46	YHR026W	3	2	3	3473.54	0.000110456
47	YDR108W	12	17	31	3469.36	0.000110323
48	YOR157C	4	9	8	3469.3	0.000110321
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2	YHL025W	1	9	19	3467.98	0.000110279
3	YPR052C	0	0	7	3466.49	0.000110232
4	YGL017W	15	12	21	3466.02	0.000110217
5	YDR291W	23	34	58	3465.39	0.000110197
6	YDL044C	6	8	28	3465.31	0.000110194
7	YDR342C	11	6	20	3462.39	0.000110101
8	YOR189W	0	0	7	3456.7	0.00010992
9	YPL206C	6	10	12	3455.45	0.000109881
10	YOL055C	14	13	14	3452.68	0.000109792
11	YKL075C	9	8	16	3451.88	0.000109767
12	YGR013W	4	17	35	3449.71	0.000109698
13	YPL070W	5	9	28	3446.51	0.000109596
14	YDL215C	10	23	38	3443.13	0.000109489
15	YGL082W	3	7	19	3442.85	0.00010948
16	YIL121W	15	5	26	3442.06	0.000109455
17	YCR034W	5	13	14	3439.25	0.000109365
18	YGL094C	21	25	54	3436.8	0.000109288
19	YJL073W	7	18	23	3434.54	0.000109216
20	YJR004C	7	8	8	3432.15	0.00010914
21	YPL221W	15	10	29	3430.05	0.000109073
22	YER047C	2	22	49	3429.76	0.000109064
23	YHR030C	9	13	21	3429.67	0.000109061
24	YGR074W	0	0	12	3428.97	0.000109039
25	YJR009C	2	8	11	3423.41	0.000108862
26	YJL019W	2	16	27	3423.1	0.000108852
27	YGL091C	11	6	5	3423.06	0.000108851
28	YMR291W	14	17	22	3420.53	0.00010877
29	YDR351W	17	23	36	3419.92	0.000108751
30	YER139C	6	6	10	3416.3	0.000108636
31	YDL234C	9	14	28	3415.02	0.000108595
32	YDR055W	4	3	1	3412.07	0.000108501
33	YAL058W	6	13	19	3412.01	0.000108499
34	YBR288C	7	10	17	3408.15	0.000108376
35	YIL093C	0	7	15	3407.38	0.000108352
36	YBL041W	2	6	11	3406.52	0.000108325
37	YAR019C	13	23	33	3405.86	0.000108304
38	YDL174C	12	16	24	3402.13	0.000108185
39	YLR063W	7	6	14	3399.95	0.000108116
40	YIL105C	2	12	26	3399.74	0.000108109
41	YBR132C	14	11	24	3399.12	0.000108089
42	YJL156C	7	16	26	3398.01	0.000108054
43	YDR505C	5	19	32	3396.64	0.00010801
44	YDR434W	4	13	11	3395.82	0.000107984
45	YOR035C	11	10	29	3394.55	0.000107944
46	YPR113W	5	6	7	3392.07	0.000107865
47	YDR305C	0	6	10	3389.13	0.000107772
48	YKL190W	0	0	10	3388.84	0.000107762
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2	YLR005W	20	18	28	3388.44	0.00010775
3	YOL019W	5	8	23	3388.2	0.000107742
4	YML007W	6	9	23	3385.82	0.000107666
5	YDR208W	4	35	46	3385.18	0.000107646
6	YER057C	2	3	3	3378.51	0.000107434
7	YJL112W	8	12	35	3378.27	0.000107426
8	YOR078W	0	4	14	3374.49	0.000107306
9	YML097C	5	5	21	3372.78	0.000107252
10	YKL033W	22	22	37	3371.73	0.000107218
11	YJL124C	1	3	12	3371.53	0.000107212
12	YLL004W	4	15	24	3364.15	0.000106977
13	YJR074W	2	5	6	3363.34	0.000106952
14	YLR371W	15	54	71	3363.15	0.000106946
15	YER087C-B	0	1	3	3362.91	0.000106938
16	YBR225W	8	28	39	3361.44	0.000106891
17	YGL225W	6	2	7	3361.08	0.00010688
18	YHR182W	14	14	34	3360.22	0.000106852
19	YGR120C	4	6	9	3360.16	0.00010685
20	YNR030W	4	11	13	3359.96	0.000106844
21	YGR195W	0	6	18	3356.92	0.000106747
22	YPR172W	2	4	4	3354.58	0.000106673
23	YLR370C	2	3	10	3351.58	0.000106578
24	YML036W	4	1	9	3348.9	0.000106492
25	YMR197C	0	2	14	3344.61	0.000106356
26	YKL201C	6	23	45	3344.31	0.000106346
27	YHL031C	2	4	14	3341.47	0.000106256
28	YDR161W	4	1	6	3339.6	0.000106197
29	YPL120W	6	6	18	3339.03	0.000106179
30	YML046W	6	9	22	3331.81	0.000105949
31	YKR097W	10	16	21	3330.39	0.000105904
32	YLR026C	0	4	16	3327.13	0.0001058
33	YBR136W	34	48	105	3325.53	0.000105749
34	YJL055W	4	8	7	3321.08	0.000105608
35	YLR188W	5	8	44	3319.45	0.000105556
36	YNL168C	4	8	11	3319.4	0.000105554
37	YKR067W	8	16	41	3317.13	0.000105482
38	YER174C	2	3	8	3313.78	0.000105376
39	YPL045W	15	12	30	3311.83	0.000105314
40	YBR042C	4	9	15	3308.93	0.000105221
41	YLR090W	13	15	16	3308.75	0.000105216
42	YMR196W	8	25	60	3308.54	0.000105209
43	YDR468C	2	4	12	3307.42	0.000105173
44	YPL040C	14	34	46	3306.94	0.000105158
45	YNL286W	5	2	10	3302.69	0.000105023
46	YBL046W	6	7	17	3301.36	0.000104981
47	YPR008W	11	20	36	3300.51	0.000104954
48	YDR197W	5	9	20	3299.09	0.000104908
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2	YDR034C	14	16	29	3298.65	0.000104894
3	YPR021C	8	18	41	3292.71	0.000104706
4	YOR294W	0	0	11	3292.32	0.000104693
5	YDR419W	17	12	24	3290.06	0.000104621
6	YML042W	7	20	25	3289.55	0.000104605
7	YBR246W	14	11	14	3287.94	0.000104554
8	YGR217W	26	33	108	3287.34	0.000104535
9	YOL078W	6	33	50	3285.73	0.000104484
10	YER126C	1	7	20	3281.3	0.000104343
11	YCR028C-A	0	2	8	3280.17	0.000104307
12	YER129W	15	29	66	3277.07	0.000104208
13	YOR371C	20	24	49	3277.04	0.000104207
14	YER019C-A	0	2	5	3272.05	0.000104049
15	YPL270W	11	12	39	3269.35	0.000103963
16	YBR089C-A	0	0	10	3264.66	0.000103814
17	YPR179C	8	17	30	3263.83	0.000103787
18	YGR171C	8	15	28	3263.19	0.000103767
19	YOR143C	8	6	12	3262.51	0.000103745
20	YBL009W	11	23	30	3256.63	0.000103558
21	YDR322W	1	7	24	3255.47	0.000103521
22	YML013W	6	14	25	3253.58	0.000103461
23	YNL005C	2	7	33	3252.9	0.00010344
24	YML076C	19	23	41	3251.51	0.000103395
25	YDR186C	1	14	36	3249.18	0.000103321
26	YPR002W	6	14	22	3249.1	0.000103319
27	YBR082C	3	4	4	3240.48	0.000103045
28	YKR099W	3	26	38	3239.99	0.000103029
29	YJL095W	6	30	59	3237.85	0.000102961
30	YJR080C	3	7	23	3230.84	0.000102738
31	YCR048W	12	15	27	3229.12	0.000102683
32	YDR146C	9	13	39	3227.09	0.000102619
33	YPR103W	5	7	13	3223.81	0.000102515
34	YMR282C	11	15	40	3222.7	0.000102479
35	YJR049C	9	14	29	3221.16	0.00010243
36	YNL173C	0	2	7	3220.89	0.000102422
37	YGR134W	15	24	49	3220.6	0.000102413
38	YLR250W	0	16	9	3217.55	0.000102316
39	YMR233W	1	3	16	3216.46	0.000102281
40	YDR316W	6	8	36	3213.82	0.000102197
41	YNL219C	11	11	20	3213.58	0.000102189
42	YLR183C	8	12	30	3209.23	0.000102051
43	YJL180C	4	4	17	3206.14	0.000101953
44	YMR001C	9	24	43	3205.62	0.000101936
45	YDR139C	0	3	2	3204.19	0.000101891
46	YBR265W	10	6	14	3201.53	0.000101806
47	YDR481C	3	26	24	3200.22	0.000101764
48	YPL170W	2	3	5	3197.62	0.000101682
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2	YHR056C	12	20	25	3196.92	0.00010166
3	YJR113C	3	5	18	3194.96	0.000101597
4	YHR137W	2	6	22	3187.17	0.000101349
5	YJL174W	3	1	9	3187.04	0.000101345
6	YLR427W	12	21	33	3186.29	0.000101322
7	YDR448W	12	12	31	3182.93	0.000101215
8	YBR131W	10	12	26	3181.07	0.000101156
9	YNL124W	1	9	18	3180.28	0.00010113
10	YFR001W	0	1	20	3175.43	0.000100976
11	YML015C	1	3	12	3169.22	0.000100779
12	YMR273C	0	25	58	3167.54	0.000100725
13	YNL185C	1	3	4	3163.93	0.00010061
14	YJR088C	4	0	9	3162.69	0.000100571
15	YPL006W	39	12	35	3157.28	0.000100399
16	YJL155C	5	6	25	3157.1	0.000100393
17	YJL068C	5	13	8	3155.57	0.000100345
18	YML021C	1	10	13	3154.86	0.000100322
19	YHL038C	8	12	33	3152.02	0.000100232
20	YNR023W	2	13	21	3150.48	0.000100183
21	YDR156W	0	2	4	3145.21	0.000100015
22	YER162C	14	13	54	3142.97	9.9944E-05
23	YIL003W	6	4	7	3140.75	9.98734E-05
24	YGR181W	4	0	3	3139.9	9.98463E-05
25	YJL159W	4	2	3	3138.89	9.98142E-05
26	YIL150C	5	14	36	3134.95	9.96889E-05
27	YIL014W	9	10	32	3133.9	9.96555E-05
28	YDR494W	2	4	23	3132.79	9.96202E-05
29	YLR093C	3	4	7	3132.7	9.96174E-05
30	YAL047C	0	14	23	3132.36	9.96066E-05
31	YER056C	7	5	11	3129.1	9.95029E-05
32	YDL173W	0	6	12	3128.49	9.94835E-05
33	YAR018C	6	14	26	3127.08	9.94387E-05
34	YOL069W	4	2	13	3122.81	9.93029E-05
35	YMR113W	11	13	19	3120.98	9.92447E-05
36	YDL159W	7	15	24	3119.74	9.92053E-05
37	YNL040W	9	10	17	3116.86	9.91137E-05
38	YNR034W	3	8	15	3116.06	9.90882E-05
39	YGL139W	10	12	33	3115.41	9.90676E-05
40	YDR475C	6	19	65	3112.54	9.89763E-05
41	YDL230W	5	12	22	3109.57	9.88819E-05
42	YKL074C	8	7	38	3106.91	9.87973E-05
43	YOR076C	8	20	17	3102.49	9.86567E-05
44	YKL180W	0	4	19	3095.92	9.84478E-05
45	YLR290C	2	5	12	3093.15	9.83597E-05
46	YMR294W	2	2	25	3088.16	9.8201E-05
47	YOR276W	1	8	7	3087.73	9.81874E-05
48	YNL037C	0	10	18	3086.92	9.81616E-05
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2	YGL004C	6	11	16	3083.23	9.80443E-05
3	YEL011W	3	27	34	3078.96	9.79085E-05
4	YGL159W	11	10	10	3075.78	9.78074E-05
5	YGR043C	2	8	11	3075.02	9.77832E-05
6	YNL183C	12	24	35	3073.02	9.77196E-05
7	YPL075W	7	9	31	3063.77	9.74255E-05
8	YLR020C	2	15	26	3063.28	9.74099E-05
9	YLR396C	7	15	25	3060.51	9.73218E-05
10	YLR209C	5	10	14	3059.71	9.72964E-05
11	YOR257W	1	3	8	3056.58	9.71968E-05
12	YBR231C	0	4	22	3054.01	9.71151E-05
13	YDL223C	0	47	33	3051.88	9.70474E-05
14	YGL005C	1	3	11	3050.08	9.69901E-05
15	YMR028W	2	8	18	3044.43	9.68105E-05
16	YGR156W	1	4	13	3043.24	9.67726E-05
17	YDR116C	3	3	18	3041.67	9.67227E-05
18	Q0140	1	5	5	3039.64	9.66582E-05
19	YIR002C	17	17	50	3035.29	9.65198E-05
20	YLR362W	8	21	29	3033.45	9.64613E-05
21	YOR127W	21	18	48	3032.85	9.64422E-05
22	YER005W	11	17	35	3032.54	9.64324E-05
23	YEL060C	4	27	18	3028.84	9.63147E-05
24	YOR367W	2	3	8	3027.47	9.62712E-05
25	YGL246C	7	8	22	3027.12	9.626E-05
26	YLR328W	4	21	25	3015.96	9.59051E-05
27	YPL178W	4	2	16	3014.92	9.58721E-05
28	YLL022C	2	10	19	3008.4	9.56647E-05
29	YCR063W	9	4	13	3004.88	9.55528E-05
30	YGR246C	9	15	35	3004.47	9.55398E-05
31	YNL073W	9	9	30	3004.25	9.55328E-05
32	YJL006C	8	6	20	3001.64	9.54498E-05
33	YDR052C	6	19	38	2999.88	9.53938E-05
34	YDR231C	2	3	8	2999.23	9.53731E-05
35	YMR160W	8	17	40	2999.22	9.53728E-05
36	YPL010W	0	4	6	2997.63	9.53223E-05
37	YKR100C	2	6	21	2994.65	9.52275E-05
38	YMR112C	1	1	5	2988.78	9.50408E-05
39	YPL096W	14	7	19	2988.62	9.50358E-05
40	YDR236C	2	4	9	2981.7	9.48157E-05
41	YGL205W	8	15	35	2980.3	9.47712E-05
42	YDL237W	6	10	13	2979.24	9.47375E-05
43	YOL141W	11	15	27	2978.08	9.47006E-05
44	YGL093W	1	16	46	2975.69	9.46246E-05
45	YNL054W	4	38	36	2973.37	9.45508E-05
46	YOR085W	5	7	7	2969.8	9.44373E-05
47	YIL035C	2	13	20	2968.55	9.43975E-05
48	YGL044C	4	1	10	2966.15	9.43212E-05
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2	YIL119C	4	8	9	2965.53	9.43015E-05
3	YPL203W	1	13	19	2961.6	9.41765E-05
4	YKL178C	10	11	16	2958.72	9.4085E-05
5	YER077C	12	12	37	2953.43	9.39167E-05
6	YOR119C	3	14	28	2952.62	9.3891E-05
7	YDR472W	4	6	17	2952.4	9.3884E-05
8	YBR072W	0	3	8	2950.46	9.38223E-05
9	YDR443C	15	35	38	2950.32	9.38178E-05
10	YJL062W	11	22	18	2950.12	9.38115E-05
11	YDR118W	8	12	30	2947.3	9.37218E-05
12	YNL299W	7	14	46	2942.83	9.35797E-05
13	YDR075W	9	7	17	2939.86	9.34852E-05
14	YHR171W	14	13	28	2939.27	9.34665E-05
15	YLR417W	12	11	27	2938.92	9.34553E-05
16	YMR234W	5	7	14	2936.93	9.33921E-05
17	YKR085C	3	4	17	2936.8	9.33879E-05
18	YJL070C	8	14	35	2935.53	9.33475E-05
19	YLR190W	6	4	23	2935.3	9.33402E-05
20	YBR060C	3	11	31	2934.19	9.33049E-05
21	YNL261W	7	8	19	2925.6	9.30318E-05
22	YIL114C	2	3	15	2922.61	9.29367E-05
23	YNL268W	6	9	21	2921.96	9.2916E-05
24	YDR057W	9	8	19	2921.59	9.29043E-05
25	YLR139C	3	17	17	2917.76	9.27825E-05
26	YER141W	3	10	27	2916.23	9.27338E-05
27	YOL138C	23	31	49	2915.65	9.27154E-05
28	YMR140W	10	11	39	2915.61	9.27141E-05
29	YGR147C	4	6	19	2910.92	9.2565E-05
30	YBR135W	1	9	9	2909.71	9.25265E-05
31	YDL156W	4	9	30	2908.64	9.24925E-05
32	YDR423C	12	7	22	2903.69	9.2335E-05
33	YHR083W	8	8	12	2901.56	9.22673E-05
34	YGL035C	4	17	29	2898.73	9.21773E-05
35	YDR415C	2	13	14	2897.48	9.21376E-05
36	YBR276C	24	25	34	2897.05	9.21239E-05
37	YOR322C	8	21	41	2896.79	9.21156E-05
38	YDR497C	9	8	19	2896.7	9.21128E-05
39	YBL098W	7	13	26	2896.49	9.21061E-05
40	YDR175C	1	11	26	2894.38	9.2039E-05
41	YNL329C	21	15	44	2887.74	9.18279E-05
42	YDR143C	6	13	35	2887.07	9.18065E-05
43	YPL031C	3	10	13	2886.83	9.17989E-05
44	YBR122C	0	1	13	2886.17	9.17779E-05
45	YAL044C	0	3	5	2886.02	9.17732E-05
46	YHR199C	4	5	12	2883.33	9.16876E-05
47	YDR089W	14	16	39	2882.41	9.16584E-05
48	YLR435W	1	2	6	2881.62	9.16332E-05
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2	YDR246W	2	2	8	2878.42	9.15315E-05
3	YLR278C	20	31	59	2877.01	9.14866E-05
4	YCL012C	1	3	12	2875.66	9.14437E-05
5	YNL321W	16	37	30	2873.89	9.13874E-05
6	YPR178W	4	14	26	2873.85	9.13862E-05
7	YGL064C	2	10	27	2872.75	9.13512E-05
8	YLR268W	2	2	7	2872.61	9.13467E-05
9	YBR014C	1	7	7	2872.19	9.13334E-05
10	YDR137W	6	12	25	2872.1	9.13305E-05
11	YDR049W	5	13	36	2870.02	9.12644E-05
12	YGR194C	15	16	26	2868.58	9.12186E-05
13	YDR163W	1	8	12	2868.38	9.12122E-05
14	YGR278W	7	13	39	2866.66	9.11575E-05
15	YBR065C	10	6	15	2863.31	9.1051E-05
16	YLL036C	9	5	17	2862.36	9.10208E-05
17	YNL197C	4	17	24	2861.14	9.0982E-05
18	YKL100C	5	17	12	2858.63	9.09022E-05
19	YOR018W	5	20	43	2858.39	9.08945E-05
20	YHR012W	5	3	6	2854.62	9.07747E-05
21	YMR211W	4	14	23	2853.89	9.07514E-05
22	YMR070W	4	32	9	2850.29	9.0637E-05
23	YER177W	2	6	11	2845.86	9.04961E-05
24	YDR288W	1	6	12	2844.69	9.04589E-05
25	YDR416W	14	14	43	2832.69	9.00773E-05
26	YDR069C	20	29	27	2832.64	9.00757E-05
27	YLR191W	0	3	16	2831.97	9.00544E-05
28	YIL162W	2	4	13	2829.8	8.99854E-05
29	YCR017C	9	25	31	2829.7	8.99822E-05
30	YGR150C	9	21	44	2828.08	8.99307E-05
31	YGR010W	4	13	22	2824.96	8.98315E-05
32	YLR089C	6	18	26	2823.62	8.97889E-05
33	YNL252C	0	5	13	2821.87	8.97332E-05
34	YOR355W	1	7	15	2820.38	8.96859E-05
35	YDR464W	3	32	71	2819.93	8.96715E-05
36	YCR005C	0	13	18	2818.37	8.96219E-05
37	YDL088C	3	13	21	2818.05	8.96118E-05
38	YGL216W	11	17	53	2816.24	8.95542E-05
39	YOL142W	7	2	8	2814.46	8.94976E-05
40	YOR022C	5	14	31	2814.3	8.94925E-05
41	YDR109C	18	12	36	2813.58	8.94696E-05
42	YLR174W	1	9	19	2804.3	8.91745E-05
43	YOR215C	0	0	7	2803.77	8.91577E-05
44	YMR105C	6	11	17	2800.65	8.90585E-05
45	YDL017W	9	12	22	2797.31	8.89522E-05
46	YNL218W	9	13	35	2796.52	8.89271E-05
47	YBL086C	2	12	17	2794.56	8.88648E-05
48	YHR192W	6	8	9	2792.11	8.87869E-05
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2	YOR131C	3	7	10	2791.11	8.87551E-05
3	YHR029C	4	5	6	2790.22	8.87268E-05
4	YAL034W-/	2	1	15	2789.98	8.87192E-05
5	YMR011W	11	2	20	2785.21	8.85675E-05
6	YCL034W	1	6	25	2784.76	8.85532E-05
7	YPL104W	8	12	34	2781.6	8.84527E-05
8	YJR057W	3	3	8	2779.3	8.83795E-05
9	YPR152C	7	6	26	2778.48	8.83535E-05
10	YBL019W	11	8	34	2774.29	8.82202E-05
11	YDR375C	2	10	22	2774.1	8.82142E-05
12	YCL036W	12	15	38	2771.75	8.81395E-05
13	YLR424W	8	17	28	2770.18	8.80895E-05
14	YIR010W	1	16	23	2769.23	8.80593E-05
15	YMR078C	9	13	35	2767.06	8.79903E-05
16	YKR087C	5	8	20	2766.94	8.79865E-05
17	YDR364C	7	21	22	2765.22	8.79318E-05
18	YPR154W	1	3	4	2761.65	8.78183E-05
19	YNR017W	3	4	5	2761.14	8.78021E-05
20	YIL156W	9	34	50	2757.72	8.76933E-05
21	YMR185W	9	20	35	2755.75	8.76307E-05
22	YKL192C	1	1	8	2755.36	8.76183E-05
23	YPL055C	2	11	26	2753.28	8.75521E-05
24	YKR063C	3	8	30	2753.05	8.75448E-05
25	YJL179W	1	1	5	2750.71	8.74704E-05
26	YOL030W	8	2	13	2747.46	8.73671E-05
27	YML060W	8	9	17	2747.32	8.73626E-05
28	YGR041W	4	13	32	2746.07	8.73229E-05
29	YCR026C	2	22	21	2745.58	8.73073E-05
30	YDR248C	3	7	7	2736.18	8.70084E-05
31	YNL149C	0	1	11	2730.51	8.68281E-05
32	YHR081W	0	2	8	2729.51	8.67963E-05
33	YNL072W	3	2	16	2726	8.66846E-05
34	YGL236C	9	13	38	2725.03	8.66538E-05
35	YBR030W	9	15	15	2722.77	8.65819E-05
36	YBR261C	3	5	10	2721.62	8.65454E-05
37	YBL010C	4	6	16	2721.39	8.65381E-05
38	YBR175W	12	11	9	2717.18	8.64042E-05
39	YOR212W	9	8	16	2716.76	8.63908E-05
40	YAL051W	18	26	48	2716.71	8.63892E-05
41	YOR288C	4	6	12	2716.14	8.63711E-05
42	YAL056W	13	22	41	2716.04	8.63679E-05
43	YKL019W	4	9	14	2713.22	8.62783E-05
44	YLL007C	13	9	29	2711.9	8.62363E-05
45	YNR018W	1	4	13	2706.06	8.60506E-05
46	YOR246C	7	13	14	2705.43	8.60305E-05
47	YBR103W	5	14	15	2702.91	8.59504E-05
48	YMR193W	0	3	18	2702.21	8.59281E-05
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2	YPR037C	6	7	8	2701.32	8.58998E-05
3	YPR040W	4	8	25	2700.71	8.58804E-05
4	YNR024W	0	1	9	2700.58	8.58763E-05
5	YKR046C	0	4	7	2699.29	8.58353E-05
6	YPL089C	1	14	23	2697.26	8.57707E-05
7	YOR090C	3	10	30	2696.15	8.57354E-05
8	YHR038W	1	2	11	2690.58	8.55583E-05
9	YCR083W	4	1	5	2685.29	8.53901E-05
10	YJL071W	5	20	26	2679.81	8.52158E-05
11	YKL091C	3	5	16	2678.55	8.51758E-05
12	YOL089C	17	22	42	2678.43	8.5172E-05
13	YER075C	13	22	32	2677.93	8.51561E-05
14	YIR033W	14	25	42	2676.79	8.51198E-05
15	YJR129C	10	5	14	2675.66	8.50839E-05
16	YPL150W	9	16	56	2675.1	8.50661E-05
17	YPR127W	5	9	14	2670.4	8.49166E-05
18	YOR359W	1	16	13	2669.74	8.48956E-05
19	YBR109C	0	2	3	2668.11	8.48438E-05
20	YPL074W	1	8	54	2666.89	8.4805E-05
21	YJR127C	27	38	64	2666.63	8.47967E-05
22	YDR181C	5	9	34	2666.36	8.47881E-05
23	YGL255W	6	7	13	2664.09	8.4716E-05
24	YER040W	4	12	31	2662.31	8.46594E-05
25	YOR308C	0	14	31	2661.94	8.46476E-05
26	YJL063C	2	7	16	2659.31	8.4564E-05
27	YPL233W	0	6	9	2658.09	8.45252E-05
28	YDR235W	10	7	16	2656.33	8.44692E-05
29	YNL249C	11	14	20	2655.29	8.44361E-05
30	YOR262W	6	4	9	2654.93	8.44247E-05
31	YDR424C	0	3	1	2652.11	8.4335E-05
32	YGR007W	9	13	14	2651.83	8.43261E-05
33	YKL038W	13	20	46	2648.53	8.42212E-05
34	YDR092W	1	2	7	2647.67	8.41938E-05
35	YDR533C	1	5	4	2644.29	8.40863E-05
36	YNL240C	13	9	24	2643.15	8.40501E-05
37	YKL018W	8	7	7	2639.07	8.39203E-05
38	YNL032W	3	10	14	2638.15	8.38911E-05
39	YJL044C	7	16	18	2636.45	8.3837E-05
40	YDR140W	6	2	8	2634.63	8.37792E-05
41	YDR171W	1	12	18	2632.79	8.37206E-05
42	YDL006W	5	7	16	2628.48	8.35836E-05
43	YBR007C	10	17	36	2624.63	8.34612E-05
44	YKL134C	17	17	31	2622.88	8.34055E-05
45	YML005W	6	16	20	2622.58	8.3396E-05
46	YKR070W	2	6	16	2621.16	8.33508E-05
47	YGL178W	10	25	20	2619.59	8.33009E-05
48	YIL151C	16	24	45	2618.45	8.32646E-05
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3	YJR097W	6	6	9	2612.3	8.30691E-05
4	YNL253W	10	12	12	2605.84	8.28637E-05
5	YDL086W	7	8	16	2605.44	8.28509E-05
6	YBR195C	7	18	13	2603.76	8.27975E-05
7	Q0050	13	17	46	2603.06	8.27753E-05
8	YLR372W	5	10	7	2602.69	8.27635E-05
9	YOR301W	8	13	31	2601.08	8.27123E-05
10	YMR221C	11	7	18	2597.82	8.26086E-05
11	YJR067C	1	3	6	2597.34	8.25934E-05
12	YKR095W-/	0	1	5	2591.71	8.24143E-05
13	YPL194W	12	13	29	2588.02	8.2297E-05
14	YKR093W	12	8	13	2587.91	8.22935E-05
15	YNL126W	4	18	37	2586.64	8.22531E-05
16	YBR002C	5	7	22	2584.99	8.22006E-05
17	YPL011C	2	5	18	2583.69	8.21593E-05
18	YKL146W	9	18	25	2582.3	8.21151E-05
19	YEL044W	1	3	14	2578.99	8.20098E-05
20	YKL155C	6	17	41	2578.32	8.19885E-05
21	YLR226W	9	4	13	2573.39	8.18318E-05
22	YBR150C	19	29	54	2568	8.16604E-05
23	YOR158W	0	6	13	2566.85	8.16238E-05
24	YML102W	10	11	21	2563.73	8.15246E-05
25	YMR006C	10	4	18	2557.38	8.13227E-05
26	YJL031C	2	8	18	2556.67	8.13001E-05
27	YMR258C	10	15	23	2555.14	8.12514E-05
28	YKL122C	0	2	5	2554.93	8.12448E-05
29	YBR164C	1	1	6	2550.55	8.11055E-05
30	YKR064W	22	21	43	2546.15	8.09656E-05
31	YGR199W	13	26	26	2540.88	8.0798E-05
32	YML128C	0	7	11	2540.15	8.07748E-05
33	YLR059C	4	10	17	2535.62	8.06307E-05
34	YOL140W	6	12	15	2534.25	8.05871E-05
35	YDR531W	3	10	9	2531.75	8.05077E-05
36	YLR361C	9	18	24	2530.71	8.04746E-05
37	YHR147C	1	6	11	2528.25	8.03964E-05
38	YOR389W	8	15	32	2527.26	8.03649E-05
39	YMR058W	6	25	15	2523.23	8.02367E-05
40	YDL028C	5	20	48	2520.08	8.01366E-05
41	YDL090C	15	10	21	2517.62	8.00583E-05
42	YOR113W	8	23	36	2517.5	8.00545E-05
43	YMR158W	5	3	8	2516.37	8.00186E-05
44	YMR250W	8	25	23	2515	7.9975E-05
45	YMR238W	10	6	11	2514.13	7.99473E-05
46	YNL317W	7	16	22	2512.68	7.99012E-05
47	YPL151C	5	16	23	2511.92	7.98771E-05
48	YKL065C	2	1	9	2509.74	7.98077E-05
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2	YMR268C	8	10	29	2509.7	7.98065E-05
3	YPL097W	7	8	28	2507.5	7.97365E-05
4	YDR014W	3	13	26	2505.15	7.96618E-05
5	YDR517W	5	9	15	2504.86	7.96526E-05
6	YJL164C	2	8	20	2503.34	7.96042E-05
7	YOR087W	9	8	30	2498.44	7.94484E-05
8	YCR019W	8	7	17	2496.91	7.93998E-05
9	YFL029C	7	8	16	2496.63	7.93909E-05
10	YPL051W	2	3	10	2496.56	7.93886E-05
11	YOL065C	9	8	17	2495.39	7.93514E-05
12	YDR378C	0	1	2	2493.5	7.92913E-05
13	YHR167W	2	5	14	2491.42	7.92252E-05
14	YOR039W	6	7	14	2489.94	7.91781E-05
15	YOR023C	5	25	30	2488.32	7.91266E-05
16	YCL067C	2	1	12	2487.77	7.91091E-05
17	YPL222W	9	12	28	2486.86	7.90802E-05
18	YLR323C	10	5	11	2485.08	7.90236E-05
19	YIR001C	1	5	10	2479.27	7.88388E-05
20	YNL238W	8	22	32	2475.97	7.87339E-05
21	YDR019C	3	11	14	2472.81	7.86334E-05
22	YGR125W	12	18	48	2471.65	7.85965E-05
23	YNL136W	1	9	24	2468.39	7.84929E-05
24	YLR220W	0	2	11	2468.15	7.84852E-05
25	YDL043C	4	5	9	2466.78	7.84417E-05
26	YGL243W	11	7	27	2466.26	7.84251E-05
27	YKR020W	0	3	7	2466.2	7.84232E-05
28	YPL246C	3	6	9	2462.72	7.83126E-05
29	YMR139W	7	10	12	2460.12	7.82299E-05
30	YML108W	1	2	1	2460.08	7.82286E-05
31	YLR066W	0	1	5	2458.17	7.81679E-05
32	YGR237C	3	28	49	2455.6	7.80861E-05
33	YCR090C	8	2	4	2455.05	7.80687E-05
34	YCL028W	0	7	6	2452.54	7.79888E-05
35	YGL067W	13	6	16	2452.05	7.79733E-05
36	YDR169C	2	16	24	2451.77	7.79643E-05
37	YFR021W	4	10	23	2449.5	7.78922E-05
38	YFR047C	9	7	9	2448.78	7.78693E-05
39	YBL074C	3	12	11	2448.32	7.78546E-05
40	YJR063W	8	1	3	2446.38	7.7793E-05
41	YLR258W	7	24	44	2445.39	7.77615E-05
42	YLR206W	2	7	37	2443.75	7.77093E-05
43	YNR022C	2	7	6	2443.66	7.77065E-05
44	YMR267W	4	8	11	2442.74	7.76772E-05
45	YPR176C	9	7	12	2442.18	7.76594E-05
46	YPL007C	9	11	18	2440.14	7.75945E-05
47	YBR187W	1	5	8	2439.31	7.75681E-05
48	YKL194C	5	12	23	2439.03	7.75592E-05
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2	YML055W	0	1	6	2438.2	7.75328E-05
3	YNL107W	1	6	8	2437.17	7.75001E-05
4	YDR131C	12	12	22	2436.31	7.74727E-05
5	YER154W	1	9	20	2433.87	7.73951E-05
6	YOR229W	2	12	22	2433.54	7.73846E-05
7	YMR169C	6	4	10	2432.48	7.73509E-05
8	YOR205C	11	10	26	2430.64	7.72924E-05
9	YEL050C	7	10	41	2430.16	7.72772E-05
10	YGR260W	13	7	18	2427.31	7.71865E-05
11	YOR349W	21	28	43	2426.23	7.71522E-05
12	YGL212W	1	4	33	2424.5	7.70972E-05
13	YLL023C	2	5	15	2423.97	7.70803E-05
14	YBR242W	5	4	12	2422.98	7.70488E-05
15	YDR130C	2	5	19	2420.79	7.69792E-05
16	YHR008C	1	6	5	2416.57	7.6845E-05
17	YMR310C	4	4	15	2413.59	7.67503E-05
18	YFL041W	4	27	23	2413.43	7.67452E-05
19	YLR055C	6	15	21	2412.96	7.67302E-05
20	YIR023W	14	26	37	2409.56	7.66221E-05
21	YNL309W	0	14	20	2408.59	7.65913E-05
22	YPR184W	20	41	75	2406.79	7.6534E-05
23	YPL161C	13	5	15	2403.44	7.64275E-05
24	YNL323W	7	7	18	2399.92	7.63156E-05
25	YOR307C	5	13	16	2398.66	7.62755E-05
26	YMR210W	7	12	29	2396.83	7.62173E-05
27	YIL106W	7	11	16	2395.61	7.61785E-05
28	YLR077W	11	17	28	2392.07	7.60659E-05
29	YIL061C	1	4	31	2390.17	7.60055E-05
30	YNL263C	3	2	9	2390.01	7.60004E-05
31	YPL241C	9	6	11	2388.23	7.59438E-05
32	YEL007W	1	18	11	2388.08	7.59391E-05
33	YGR275W	1	1	7	2387.98	7.59359E-05
34	YDL001W	3	13	26	2384.05	7.58109E-05
35	YGL156W	17	27	48	2381.18	7.57196E-05
36	YGR040W	6	10	17	2374.15	7.54961E-05
37	YBR119W	1	3	22	2370.28	7.5373E-05
38	YMR243C	5	25	18	2368.91	7.53295E-05
39	YKL013C	0	4	12	2363.53	7.51584E-05
40	YNL167C	3	14	26	2363.38	7.51536E-05
41	YGL019W	9	8	13	2363.1	7.51447E-05
42	YMR313C	12	12	30	2362.97	7.51406E-05
43	YKL186C	3	3	8	2361.56	7.50957E-05
44	YBR212W	4	14	28	2360.81	7.50719E-05
45	YLR377C	5	8	15	2360.72	7.5069E-05
46	YNR010W	1	5	8	2356.83	7.49453E-05
47	YDR400W	7	8	10	2354.12	7.48592E-05
48	YGL071W	8	38	25	2352.47	7.48067E-05
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2	YDR444W	3	17	35	2351.4	7.47727E-05
3	YKR096W	18	22	59	2348.79	7.46897E-05
4	YNL116W	11	16	30	2347.97	7.46636E-05
5	YBR117C	3	18	28	2347.86	7.46601E-05
6	YDR391C	6	5	10	2347.17	7.46382E-05
7	YJR122W	2	9	25	2343.43	7.45192E-05
8	YOR070C	4	20	36	2342.89	7.45021E-05
9	YDR369C	9	13	44	2341.34	7.44528E-05
10	YLR256W	23	43	54	2340.73	7.44334E-05
11	YLL010C	4	11	19	2335.55	7.42686E-05
12	YER051W	9	14	17	2333.82	7.42136E-05
13	YLR228C	8	23	26	2333.73	7.42108E-05
14	YPL176C	6	11	28	2330.13	7.40963E-05
15	YGR063C	6	2	4	2329.82	7.40864E-05
16	YPL078C	1	2	11	2329.13	7.40645E-05
17	YPL227C	5	8	20	2328.41	7.40416E-05
18	YCL047C	6	8	10	2326.41	7.3978E-05
19	YOR250C	6	9	18	2325.33	7.39437E-05
20	YKL058W	3	1	6	2325.25	7.39411E-05
21	YFR011C	2	0	1	2320.64	7.37945E-05
22	YGR060W	5	18	10	2317.3	7.36883E-05
23	YDL207W	5	10	30	2316.91	7.36759E-05
24	YMR037C	5	21	28	2311.55	7.35055E-05
25	YFL025C	9	24	38	2309.75	7.34482E-05
26	YEL029C	7	6	10	2305.9	7.33258E-05
27	YMR117C	0	2	10	2305.47	7.33121E-05
28	YDL108W	4	7	16	2304.79	7.32905E-05
29	YNR040W	3	4	15	2303.93	7.32632E-05
30	YMR283C	8	11	24	2302.23	7.32091E-05
31	YHR041C	2	4	9	2301.69	7.31919E-05
32	YAL048C	17	13	24	2301.16	7.31751E-05
33	YLR231C	7	12	17	2299.74	7.31299E-05
34	YKL042W	2	6	24	2297.97	7.30736E-05
35	YFR048W	4	17	50	2295.43	7.29929E-05
36	YFR034C	1	13	18	2294.5	7.29633E-05
37	YHR005C-A	4	0	1	2294.19	7.29534E-05
38	YOR224C	2	0	9	2291.56	7.28698E-05
39	YLR117C	4	9	42	2290.33	7.28307E-05
40	YFL009W	8	24	31	2289.32	7.27986E-05
41	YDR489W	4	5	12	2288.65	7.27773E-05
42	YPL022W	10	24	53	2288.64	7.27769E-05
43	YPL254W	3	10	21	2288.56	7.27744E-05
44	YDL144C	5	8	19	2288.47	7.27715E-05
45	YCR073W-J	5	10	14	2287.85	7.27518E-05
46	YOR286W	1	4	7	2286.23	7.27003E-05
47	YOL149W	2	4	7	2282.01	7.25661E-05
48	YBR176W	7	5	7	2281.47	7.25489E-05
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2	YNL234W	4	12	15	2278.49	7.24542E-05
3	YKL039W	9	7	15	2273.79	7.23047E-05
4	YGL227W	7	11	41	2273.71	7.23022E-05
5	YHR040W	14	11	20	2273.37	7.22914E-05
6	YDR110W	9	13	34	2270.35	7.21953E-05
7	YNL227C	6	10	24	2269.59	7.21712E-05
8	YDL115C	0	10	21	2268.7	7.21429E-05
9	YDL092W	2	4	5	2268.53	7.21375E-05
10	YCR065W	4	20	25	2268.49	7.21362E-05
11	YKL207W	2	4	4	2267.97	7.21197E-05
12	YDL070W	3	16	26	2266.48	7.20723E-05
13	YDR371W	5	16	18	2265.05	7.20268E-05
14	YEL053C	12	16	22	2264.6	7.20125E-05
15	YJR111C	3	9	13	2260.71	7.18888E-05
16	YMR106C	11	8	26	2256.42	7.17524E-05
17	YDR162C	0	3	5	2256.24	7.17466E-05
18	YLR436C	8	36	45	2253.98	7.16748E-05
19	YLR253W	9	18	31	2253.85	7.16706E-05
20	YPL155C	6	12	54	2251.67	7.16013E-05
21	YKL064W	6	25	67	2245.1	7.13924E-05
22	YGR189C	2	3	6	2244.61	7.13768E-05
23	YER101C	4	12	15	2243.6	7.13447E-05
24	YML058W	1	1	5	2242.62	7.13135E-05
25	YNL115C	3	18	33	2242.13	7.1298E-05
26	YNL066W	11	3	4	2240.76	7.12544E-05
27	YHL029C	6	21	17	2240.52	7.12468E-05
28	YKL022C	16	17	31	2240.47	7.12452E-05
29	YNL047C	4	15	28	2239.52	7.1215E-05
30	YLL006W	3	9	17	2239.38	7.12105E-05
31	YDR113C	1	5	14	2237.94	7.11647E-05
32	YJR015W	6	6	17	2232.71	7.09984E-05
33	YDR198C	8	13	17	2230.28	7.09211E-05
34	YDR439W	1	5	22	2229.53	7.08973E-05
35	YPL181W	7	6	41	2228.76	7.08728E-05
36	YFL044C	3	7	8	2226.44	7.0799E-05
37	YPR065W	0	16	13	2226.26	7.07933E-05
38	YAL011W	3	9	40	2226.21	7.07917E-05
39	YPL141C	10	22	53	2225.87	7.07809E-05
40	YOL054W	11	11	29	2223.81	7.07154E-05
41	YML088W	7	18	38	2222.54	7.0675E-05
42	YDR012W	1	10	25	2220.54	7.06114E-05
43	YJL094C	8	17	30	2219.36	7.05739E-05
44	YFL014W	0	2	3	2217.28	7.05078E-05
45	YDR200C	3	15	28	2216.37	7.04788E-05
46	YGR091W	4	14	22	2216.26	7.04753E-05
47	YAL002W	26	30	41	2215.92	7.04645E-05
48	YCR047C	4	4	17	2213.75	7.03955E-05
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2	YOR299W	17	10	33	2212.84	7.03666E-05
3	YML121W	5	7	10	2210.8	7.03017E-05
4	YGR028W	3	2	18	2207.07	7.01831E-05
5	YLL031C	12	30	28	2206.97	7.01799E-05
6	YDR532C	2	5	9	2205.41	7.01303E-05
7	YMR044W	5	4	25	2204.19	7.00915E-05
8	YNL097C	8	13	21	2201.89	7.00184E-05
9	YAL032C	1	8	24	2200.23	6.99656E-05
10	YER083C	0	4	10	2200.04	6.99595E-05
11	YHR079C	14	25	60	2199.93	6.9956E-05
12	YDR240C	8	13	27	2199.21	6.99331E-05
13	YNL113W	2	3	3	2198.04	6.98959E-05
14	YJL212C	12	12	26	2197.2	6.98692E-05
15	YOL148C	2	11	34	2196.33	6.98416E-05
16	YOR075W	4	8	15	2194.17	6.97729E-05
17	YHR159W	2	14	35	2193.94	6.97656E-05
18	YGL200C	3	6	13	2191.2	6.96784E-05
19	YMR269W	0	6	13	2190.48	6.96555E-05
20	YLR215C	4	8	14	2190.32	6.96504E-05
21	YJL217W	1	5	9	2190.25	6.96482E-05
22	YOR115C	2	8	12	2189.02	6.96091E-05
23	YJR010W	1	14	32	2187.79	6.957E-05
24	YIL159W	15	26	50	2185.07	6.94835E-05
25	YDR514C	10	13	24	2184.11	6.9453E-05
26	YNL193W	6	10	18	2182.95	6.94161E-05
27	YLR345W	6	14	27	2172.81	6.90936E-05
28	YDR262W	1	4	10	2171.55	6.90536E-05
29	YPR051W	4	4	12	2170.89	6.90326E-05
30	YGL224C	5	10	11	2170.44	6.90183E-05
31	YJL143W	4	3	10	2170.07	6.90065E-05
32	YLR241W	9	16	33	2169.33	6.8983E-05
33	YGR188C	7	20	51	2169.23	6.89798E-05
34	YIL173W	35	30	70	2166.86	6.89044E-05
35	YNL160W	2	2	5	2166.32	6.88873E-05
36	YOR231W	7	7	22	2165.55	6.88628E-05
37	YOR163W	4	6	13	2164.11	6.8817E-05
38	YGL056C	4	18	21	2163.55	6.87992E-05
39	YML114C	1	16	18	2162.99	6.87814E-05
40	YDR063W	2	0	6	2159.55	6.8672E-05
41	YIL085C	14	14	25	2158.18	6.86284E-05
42	YNL274C	4	11	18	2156.77	6.85836E-05
43	YGR258C	4	10	51	2155.48	6.85426E-05
44	YDL197C	4	16	23	2152.8	6.84573E-05
45	YGR283C	6	10	10	2152.39	6.84443E-05
46	YMR066W	9	13	36	2150.49	6.83839E-05
47	YMR287C	13	22	47	2150.08	6.83708E-05
48	YPR056W	9	5	14	2148.7	6.8327E-05
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2	YHR097C	1	18	26	2147.21	6.82796E-05
3	YML029W	8	19	37	2146.64	6.82615E-05
4	YOR043W	8	12	22	2145.95	6.82395E-05
5	YDL087C	6	8	22	2145.85	6.82363E-05
6	YOR016C	2	3	8	2143.83	6.81721E-05
7	YDR268W	2	12	17	2143.77	6.81702E-05
8	YIR035C	1	3	6	2140.59	6.80691E-05
9	YGL054C	2	4	3	2139.3	6.80281E-05
10	YJR083C	0	8	16	2138.88	6.80147E-05
11	YDR222W	8	8	13	2137.34	6.79657E-05
12	YOR111W	4	2	6	2133.56	6.78455E-05
13	YBR057C	1	11	10	2130.27	6.77409E-05
14	YPR156C	11	7	21	2129.26	6.77088E-05
15	YGL210W	3	3	8	2125.14	6.75778E-05
16	YDR229W	3	10	18	2122.65	6.74986E-05
17	YLR021W	2	3	5	2122.46	6.74926E-05
18	YGR122W	8	4	13	2122.43	6.74916E-05
19	YDR499W	6	18	33	2122.3	6.74875E-05
20	YOR166C	7	13	15	2121.19	6.74522E-05
21	YDR506C	7	22	19	2120.59	6.74331E-05
22	YLR352W	18	30	42	2119.89	6.74108E-05
23	YOR144C	8	21	42	2113.85	6.72188E-05
24	YGL174W	0	7	11	2111.56	6.71459E-05
25	YGR163W	4	5	12	2110.02	6.7097E-05
26	YNR037C	0	2	7	2109.9	6.70932E-05
27	YOR329C	2	25	35	2109.84	6.70912E-05
28	YDR054C	1	6	13	2109.76	6.70887E-05
29	YDL004W	1	2	5	2106.37	6.69809E-05
30	YNL315C	2	9	15	2105.09	6.69402E-05
31	YKL168C	16	26	50	2103.78	6.68985E-05
32	YLL012W	7	21	23	2103.25	6.68817E-05
33	YNL310C	6	11	9	2102.46	6.68566E-05
34	YKL167C	1	6	7	2101.07	6.68124E-05
35	YBL080C	3	16	25	2100.76	6.68025E-05
36	YOR388C	4	9	18	2099.72	6.67694E-05
37	YNR052C	1	8	12	2098.39	6.67271E-05
38	YBR257W	6	2	16	2098.15	6.67195E-05
39	YER161C	0	5	28	2097.89	6.67112E-05
40	YJL052W	2	8	11	2096.61	6.66705E-05
41	YOR008C	9	7	6	2096.28	6.666E-05
42	YAR003W	10	12	17	2096.21	6.66578E-05
43	YEL018W	0	7	14	2092.26	6.65322E-05
44	YBL091C-A	1	3	8	2088.54	6.64139E-05
45	YNL103W	0	27	22	2087.88	6.63929E-05
46	YKL034W	10	21	33	2083.71	6.62603E-05
47	YGR222W	0	6	15	2082.81	6.62317E-05
48	YDR470C	3	6	21	2076.42	6.60285E-05
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2	YKL020C	16	22	48	2075.66	6.60043E-05
3	YCL052C	5	10	24	2074.79	6.59767E-05
4	YBL066C	16	34	45	2074.16	6.59566E-05
5	YIR007W	19	19	26	2073.87	6.59474E-05
6	YHR011W	8	4	21	2072.43	6.59016E-05
7	YJR011C	5	5	8	2070.43	6.5838E-05
8	YIL064W	3	2	6	2069.1	6.57957E-05
9	YKL002W	0	1	15	2068.1	6.57639E-05
10	YMR264W	1	5	14	2067.27	6.57376E-05
11	YBL060W	8	15	24	2066.59	6.57159E-05
12	YIL083C	2	10	16	2064.68	6.56552E-05
13	YJR093C	0	2	11	2063.84	6.56285E-05
14	YBL059C-A	4	3	7	2060.66	6.55274E-05
15	YEL025C	30	24	51	2060.6	6.55255E-05
16	YHR168W	6	14	27	2060.27	6.5515E-05
17	YML020W	4	16	33	2059.51	6.54908E-05
18	YCR015C	9	7	9	2056.18	6.53849E-05
19	YKL149C	5	16	23	2055.73	6.53706E-05
20	YDR183W	4	7	13	2054.64	6.53359E-05
21	YLR393W	3	3	15	2049.63	6.51766E-05
22	YOL056W	4	6	17	2046.35	6.50723E-05
23	YJL153C	6	9	17	2043.6	6.49849E-05
24	YMR119W	19	8	27	2039.24	6.48462E-05
25	YDR041W	1	5	14	2038.15	6.48116E-05
26	YDR436W	13	19	53	2035.61	6.47308E-05
27	YBL063W	16	27	41	2032.48	6.46313E-05
28	YDL089W	3	11	25	2030.75	6.45762E-05
29	YGL180W	12	25	37	2028.52	6.45053E-05
30	YGR084C	1	9	18	2025.61	6.44128E-05
31	YGR166W	7	10	21	2024.76	6.43858E-05
32	YPL239W	2	5	5	2023.34	6.43406E-05
33	YHR085W	5	10	16	2021.93	6.42958E-05
34	YBR120C	0	2	11	2021.62	6.42859E-05
35	YIR021W	9	3	18	2013.39	6.40242E-05
36	YML037C	4	8	9	2013.34	6.40226E-05
37	YPL100W	14	8	24	2012.6	6.39991E-05
38	YIL017C	20	16	31	2011.44	6.39622E-05
39	YLR326W	6	8	14	2010.32	6.39266E-05
40	YDR405W	2	6	20	2009.65	6.39053E-05
41	YLR240W	11	16	44	2008.44	6.38668E-05
42	YJL099W	18	14	30	2008.14	6.38573E-05
43	YMR157C	5	2	15	2004.63	6.37457E-05
44	YHR143W	4	1	8	2004.42	6.3739E-05
45	YGR205W	4	6	8	2002.82	6.36881E-05
46	YGL143C	2	10	28	2001.5	6.36461E-05
47	YPL067C	0	9	12	1998.56	6.35526E-05
48	YOR296W	14	21	59	1998.32	6.3545E-05
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2	YOR026W	10	3	12	1997.7	6.35253E-05
3	YER182W	0	4	14	1995.58	6.34579E-05
4	YFR015C	7	21	39	1995.07	6.34416E-05
5	YBR085C-A	0	2	0	1993.79	6.34009E-05
6	YCR059C	2	10	10	1993.58	6.33943E-05
7	YGL119W	6	8	30	1993.45	6.33901E-05
8	YGL254W	12	18	12	1992.36	6.33555E-05
9	YDL098C	3	5	11	1990.37	6.32922E-05
10	YKL116C	9	8	30	1990.36	6.32919E-05
11	YER147C	18	13	24	1986.93	6.31828E-05
12	YKR037C	2	6	23	1984.14	6.30941E-05
13	YDR296W	4	6	17	1983.77	6.30823E-05
14	YOR327C	1	1	8	1980.04	6.29637E-05
15	YPR187W	0	2	9	1979.72	6.29535E-05
16	YMR026C	8	5	19	1978.2	6.29052E-05
17	YGL160W	8	16	26	1977.08	6.28696E-05
18	YLL062C	4	8	12	1976.14	6.28397E-05
19	YMR077C	0	4	10	1973.98	6.2771E-05
20	YPL255W	2	9	32	1973.49	6.27554E-05
21	YMR022W	3	2	5	1969.93	6.26422E-05
22	YBL084C	16	20	22	1969.15	6.26174E-05
23	YJL131C	1	6	22	1968.42	6.25942E-05
24	YCR086W	1	2	3	1965.55	6.25029E-05
25	YLR034C	10	7	10	1965.09	6.24883E-05
26	YHR155W	19	24	56	1964.69	6.24756E-05
27	YKL089W	1	4	30	1964.52	6.24702E-05
28	YPL252C	6	6	8	1964.41	6.24667E-05
29	YIL019W	0	5	27	1963.42	6.24352E-05
30	YLR405W	14	11	21	1963.26	6.24301E-05
31	YPR128C	1	5	11	1961.69	6.23802E-05
32	YGL057C	0	4	12	1958.81	6.22886E-05
33	YML131W	3	4	6	1956.49	6.22148E-05
34	YMR289W	8	5	22	1956.18	6.2205E-05
35	YLR239C	8	5	17	1954.64	6.2156E-05
36	YGL084C	6	14	29	1952.69	6.2094E-05
37	YOR337W	14	10	35	1950.8	6.20339E-05
38	YBL075C	2	6	34	1950.43	6.20221E-05
39	YCR095C	4	6	18	1950.35	6.20196E-05
40	YDR237W	4	12	15	1949.93	6.20062E-05
41	YMR173W	0	0	6	1948.55	6.19624E-05
42	YNL009W	2	7	19	1944.85	6.18447E-05
43	YBR021W	16	11	21	1944.78	6.18425E-05
44	YGL211W	13	6	22	1944.74	6.18412E-05
45	YJR089W	12	19	49	1944.63	6.18377E-05
46	YNL320W	6	8	12	1942.48	6.17693E-05
47	YNR046W	5	3	2	1942.35	6.17652E-05
48	YPR114W	4	8	7	1940.07	6.16927E-05
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2	YER142C	4	3	12	1938.67	6.16482E-05
3	YBR036C	7	4	11	1937.46	6.16097E-05
4	YDR409W	10	19	45	1937.05	6.15967E-05
5	YNL325C	11	24	40	1937	6.15951E-05
6	YNL280C	7	9	18	1933.25	6.14758E-05
7	YLR312W-/-	6	7	10	1931.96	6.14348E-05
8	YMR135C	4	11	13	1931.71	6.14269E-05
9	YDL220C	20	21	45	1929.58	6.13591E-05
10	YCL010C	3	3	18	1927.02	6.12777E-05
11	YLR103C	7	9	34	1926.52	6.12618E-05
12	YLR082C	3	8	22	1920.72	6.10774E-05
13	YGR106C	4	3	1	1918.72	6.10138E-05
14	YGL124C	13	14	26	1917.17	6.09645E-05
15	YDR086C	1	1	3	1916.77	6.09518E-05
16	YBL052C	11	17	55	1914.68	6.08853E-05
17	YBR141C	9	9	24	1913.31	6.08417E-05
18	YCR060W	2	2	5	1910.27	6.07451E-05
19	YDR307W	12	12	24	1906.23	6.06166E-05
20	YBR271W	7	9	15	1903.71	6.05365E-05
21	YLR052W	0	8	8	1899.3	6.03962E-05
22	YLR316C	9	4	20	1899.11	6.03902E-05
23	YML023C	14	11	26	1897.34	6.03339E-05
24	YHR086W	6	6	16	1896.02	6.02919E-05
25	YNL082W	14	19	40	1895.33	6.027E-05
26	YPR147C	5	15	9	1894.62	6.02474E-05
27	YPR058W	5	7	16	1892.74	6.01876E-05
28	YER144C	20	20	42	1891.95	6.01625E-05
29	YPR081C	8	13	36	1891.45	6.01466E-05
30	YGR220C	2	11	16	1890.45	6.01148E-05
31	YLR088W	6	13	23	1888.48	6.00522E-05
32	YBR213W	8	6	19	1888.14	6.00414E-05
33	YMR270C	2	10	18	1886.09	5.99762E-05
34	YCR087C-A	6	5	2	1882.19	5.98522E-05
35	YNR039C	4	12	20	1881.19	5.98204E-05
36	YAL015C	5	5	17	1880.7	5.98048E-05
37	YGR031W	5	12	21	1876.53	5.96722E-05
38	YPR045C	8	9	18	1874.74	5.96153E-05
39	YEL052W	9	14	30	1874.45	5.9606E-05
40	YML109W	2	27	46	1870.85	5.94916E-05
41	YGL136C	3	10	24	1870.49	5.94801E-05
42	YPR063C	3	1	2	1870.24	5.94722E-05
43	YKL001C	4	4	15	1866.68	5.93589E-05
44	YLR201C	2	12	12	1865.98	5.93367E-05
45	YDR078C	5	9	6	1864.6	5.92928E-05
46	YNL288W	7	7	19	1863.98	5.92731E-05
47	YBR287W	3	4	10	1863.91	5.92709E-05
48	YDL025C	7	37	25	1861.85	5.92054E-05
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2	YNL158W	1	7	8	1860.27	5.91551E-05
3	YKL154W	3	1	9	1859.15	5.91195E-05
4	YIL138C	1	0	5	1858.77	5.91074E-05
5	YMR188C	1	4	19	1857.84	5.90778E-05
6	YDR182W	5	15	29	1856.84	5.9046E-05
7	YDL093W	15	24	23	1856.72	5.90422E-05
8	YLR284C	6	4	11	1856.47	5.90343E-05
9	YKL214C	1	8	23	1853.75	5.89478E-05
10	YGR065C	13	10	27	1853.69	5.89459E-05
11	YER118C	2	6	18	1851.33	5.88708E-05
12	YDR392W	2	9	23	1849.69	5.88187E-05
13	YNL151C	0	2	6	1848.97	5.87958E-05
14	YJR130C	14	11	28	1848.45	5.87792E-05
15	YAL030W	1	2	9	1844.75	5.86616E-05
16	YCR076C	2	3	10	1844.33	5.86482E-05
17	YLR403W	7	36	21	1843.52	5.86225E-05
18	YDL059C	3	4	8	1842.1	5.85773E-05
19	YDR318W	1	8	16	1841.86	5.85697E-05
20	YLR130C	6	15	11	1841.51	5.85586E-05
21	YGL061C	1	6	15	1840.27	5.85191E-05
22	YNL015W	0	6	0	1839.63	5.84988E-05
23	YPL265W	9	5	22	1838.7	5.84692E-05
24	YLR237W	13	12	14	1838.3	5.84565E-05
25	YNL152W	5	10	28	1836.04	5.83846E-05
26	YOL082W	9	7	13	1835.59	5.83703E-05
27	YDL091C	3	11	35	1835.5	5.83675E-05
28	YDR252W	2	6	3	1833.13	5.82921E-05
29	YBR137W	4	4	8	1830.54	5.82097E-05
30	YIR038C	0	7	9	1830.19	5.81986E-05
31	YBR211C	1	5	18	1828.85	5.8156E-05
32	YKL185W	11	15	38	1824.78	5.80266E-05
33	YOR181W	1	11	31	1824.68	5.80234E-05
34	YKL151C	12	7	16	1820.97	5.79054E-05
35	YIL117C	0	6	12	1820.14	5.7879E-05
36	YHR062C	4	7	19	1818.89	5.78393E-05
37	YHR031C	4	10	47	1818.7	5.78332E-05
38	YLR085C	9	12	16	1818.68	5.78326E-05
39	YGR170W	15	28	63	1817.69	5.78011E-05
40	YMR132C	6	3	11	1816.37	5.77591E-05
41	YJL209W	12	19	38	1815.42	5.77289E-05
42	YIL016W	1	2	10	1812.86	5.76475E-05
43	YER113C	14	14	25	1811.16	5.75935E-05
44	YDR255C	10	16	10	1809.92	5.7554E-05
45	YJL149W	10	18	27	1808.99	5.75245E-05
46	YNL011C	6	19	15	1807.03	5.74621E-05
47	YDR492W	11	12	9	1806.66	5.74504E-05
48	YER163C	0	11	14	1805.52	5.74141E-05
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2	YOR244W	7	11	27	1803.23	5.73413E-05
3	YLL041C	15	4	15	1801.58	5.72888E-05
4	YDL133W	6	7	22	1801.09	5.72732E-05
5	YIL111W	0	1	9	1798.89	5.72033E-05
6	YPL083C	0	10	22	1798.33	5.71855E-05
7	YBL026W	1	1	6	1798.2	5.71813E-05
8	YHL014C	4	10	16	1797.59	5.71619E-05
9	YBR280C	11	18	27	1796.77	5.71359E-05
10	YMR201C	8	13	28	1794.83	5.70742E-05
11	YHL023C	15	36	52	1794.17	5.70532E-05
12	YER159C	1	2	5	1792.03	5.69851E-05
13	YNL159C	1	5	21	1791.85	5.69794E-05
14	YNL177C	3	7	23	1791.66	5.69734E-05
15	YPL064C	4	2	20	1790.38	5.69327E-05
16	YLR084C	10	6	22	1789.49	5.69044E-05
17	YOR352W	4	9	15	1789.23	5.68961E-05
18	YDR476C	3	6	11	1787.37	5.6837E-05
19	YDR422C	4	34	42	1785.68	5.67832E-05
20	YDL013W	10	12	73	1784.9	5.67584E-05
21	YGL029W	0	1	15	1782.35	5.66773E-05
22	YMR176W	27	31	62	1781.51	5.66506E-05
23	YPL108W	4	5	12	1780.2	5.6609E-05
24	YER134C	4	3	7	1780.01	5.66029E-05
25	YOL126C	5	11	14	1777.71	5.65298E-05
26	YCR066W	12	11	25	1777.42	5.65206E-05
27	YLR227W-E	14	62	70	1775.71	5.64662E-05
28	YNL191W	6	11	22	1775.45	5.64579E-05
29	YGR179C	1	13	24	1775.35	5.64547E-05
30	YER128W	3	2	9	1773.26	5.63883E-05
31	YDR362C	11	15	30	1773.15	5.63848E-05
32	YBR192W	3	6	16	1772.67	5.63695E-05
33	YDR322C-A	1	1	3	1772.23	5.63555E-05
34	YGR004W	2	8	30	1770.35	5.62957E-05
35	YBR077C	2	4	2	1767.93	5.62188E-05
36	YGR024C	6	5	7	1766.13	5.61615E-05
37	YDR297W	1	18	11	1759.88	5.59628E-05
38	YHR060W	1	1	7	1759.8	5.59602E-05
39	YPL132W	5	4	22	1757.92	5.59005E-05
40	YCR071C	4	1	8	1757.53	5.58881E-05
41	YNL157W	1	2	5	1757.43	5.58849E-05
42	YNR028W	2	9	14	1756.99	5.58709E-05
43	YDR383C	2	0	9	1754.45	5.57901E-05
44	YNR049C	0	7	14	1754.05	5.57774E-05
45	YGR049W	7	6	3	1753.3	5.57536E-05
46	YBL025W	3	5	6	1749.63	5.56369E-05
47	YLL043W	6	18	29	1749.23	5.56241E-05
48	YNL095C	11	7	27	1748.85	5.5612E-05
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2	YGR071C	14	29	28	1747.96	5.55837E-05
3	YDL106C	3	17	23	1745.6	5.55087E-05
4	YLR414C	7	4	6	1745.57	5.55077E-05
5	YJR084W	9	12	32	1739.78	5.53236E-05
6	YJL129C	9	39	79	1737.94	5.52651E-05
7	YBL013W	9	8	32	1736.66	5.52244E-05
8	YEL020C	8	8	24	1736.27	5.5212E-05
9	YLR008C	0	3	2	1733.72	5.51309E-05
10	YER015W	13	13	35	1731.22	5.50514E-05
11	YLR425W	19	26	57	1730.92	5.50419E-05
12	YLR131C	8	28	38	1730.49	5.50282E-05
13	YBR197C	1	6	14	1730.23	5.50199E-05
14	YIR022W	1	3	5	1729.12	5.49847E-05
15	YPL242C	20	26	80	1728.94	5.49789E-05
16	YHR195W	4	7	19	1727.98	5.49484E-05
17	YGR203W	2	6	14	1726.18	5.48912E-05
18	YAL033W	4	4	10	1726.04	5.48867E-05
19	YBR024W	7	4	23	1724.78	5.48466E-05
20	YHR034C	10	8	20	1723.68	5.48117E-05
21	YJR110W	10	22	36	1722.69	5.47802E-05
22	YOR273C	5	9	31	1718.85	5.46581E-05
23	YPL175W	7	17	21	1718	5.4631E-05
24	YKR027W	20	11	37	1715.76	5.45598E-05
25	YDR377W	0	6	5	1714.95	5.45341E-05
26	YBR095C	0	5	27	1714.53	5.45207E-05
27	YDR046C	9	11	25	1713.76	5.44962E-05
28	YJR048W	3	4	3	1711.73	5.44317E-05
29	YOR311C	2	8	9	1708.56	5.43309E-05
30	YMR198W	12	13	30	1706.1	5.42526E-05
31	YDL238C	11	14	20	1705.53	5.42345E-05
32	YGR143W	6	17	30	1705.12	5.42215E-05
33	YOR386W	9	13	29	1705.11	5.42212E-05
34	YHR017W	6	12	20	1704.98	5.4217E-05
35	YER050C	1	2	14	1700.35	5.40698E-05
36	YHL019C	9	13	25	1698.85	5.40221E-05
37	YIL127C	1	7	14	1698.48	5.40103E-05
38	YOR067C	8	10	21	1698.27	5.40036E-05
39	YNL020C	6	16	23	1697.88	5.39912E-05
40	YMR312W	4	10	6	1697.28	5.39722E-05
41	YPL059W	2	0	9	1696.6	5.39505E-05
42	YCR010C	3	4	7	1694.33	5.38784E-05
43	YDR196C	4	3	14	1692.82	5.38303E-05
44	YGR076C	0	4	7	1691.81	5.37982E-05
45	YMR236W	1	3	7	1690.66	5.37617E-05
46	YOR330C	28	19	61	1686.72	5.36364E-05
47	YDL149W	8	23	42	1686.32	5.36236E-05
48	YDR204W	3	9	28	1685.79	5.36068E-05
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2	YNL052W	0	1	9	1684.16	5.3555E-05
3	YDR530C	8	12	5	1680.89	5.3451E-05
4	YOR081C	7	21	29	1680.78	5.34475E-05
5	YMR190C	18	33	82	1679.71	5.34135E-05
6	YBR233W	4	15	22	1675.03	5.32646E-05
7	YKL023W	2	4	22	1674.94	5.32618E-05
8	YPL168W	4	8	22	1674.71	5.32545E-05
9	YML120C	0	11	22	1673.31	5.32099E-05
10	YOL033W	11	16	29	1673.15	5.32048E-05
11	YMR255W	0	5	5	1672.65	5.31889E-05
12	YOR040W	8	10	16	1671.79	5.31616E-05
13	YLR344W	0	2	12	1671.53	5.31533E-05
14	YGL108C	1	3	10	1667.93	5.30389E-05
15	YIL079C	16	12	27	1666.61	5.29969E-05
16	YFR049W	2	5	6	1662.59	5.2869E-05
17	YER140W	5	12	39	1661.96	5.2849E-05
18	YJL096W	0	4	14	1659.64	5.27752E-05
19	YPL015C	7	12	11	1659.2	5.27612E-05
20	YJR055W	7	4	5	1658.92	5.27523E-05
21	YHR144C	14	9	23	1658.34	5.27339E-05
22	YLR286C	12	2	4	1657.18	5.2697E-05
23	YLR375W	10	19	13	1655.37	5.26395E-05
24	YPL069C	0	13	12	1654.86	5.26232E-05
25	YDR363W	2	6	23	1648.52	5.24216E-05
26	YGL058W	1	3	8	1648.04	5.24064E-05
27	YOR360C	11	25	20	1647.77	5.23978E-05
28	YBR083W	3	13	18	1647.03	5.23743E-05
29	YHR016C	1	7	40	1646.01	5.23418E-05
30	YCR014C	16	7	30	1645.75	5.23335E-05
31	YCL004W	5	8	26	1645.63	5.23297E-05
32	YPR155C	8	14	31	1643.02	5.22467E-05
33	YDL045C	5	7	15	1642.4	5.2227E-05
34	YMR009W	4	6	11	1641.64	5.22029E-05
35	YER095W	8	7	20	1641.56	5.22003E-05
36	YKR042W	10	5	3	1640.04	5.2152E-05
37	YEL062W	12	9	29	1639.47	5.21339E-05
38	YDR524C	11	20	21	1637.76	5.20795E-05
39	YJR047C	2	5	4	1636.56	5.20413E-05
40	YPL247C	11	11	20	1636.43	5.20372E-05
41	YDL046W	4	1	5	1635.72	5.20146E-05
42	YDL081C	0	0	0	1635.28	5.20006E-05
43	YPR119W	5	13	23	1633.38	5.19402E-05
44	YER018C	2	11	22	1631.09	5.18674E-05
45	YPL024W	3	0	10	1630.48	5.1848E-05
46	YHR036W	6	11	18	1629.63	5.18209E-05
47	YER137C	4	5	4	1628.82	5.17952E-05
48	YHR202W	7	23	28	1627.63	5.17573E-05
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2	YBR044C	12	8	26	1626.55	5.1723E-05
3	YMR251W-	0	0	0	1624.99	5.16734E-05
4	YMR121C	1	5	33	1624.18	5.16476E-05
5	YMR224C	7	18	34	1622.91	5.16073E-05
6	YDR404C	4	4	6	1622.18	5.1584E-05
7	YDL157C	2	1	5	1620.07	5.15169E-05
8	YCL026C-B	0	4	5	1619.5	5.14988E-05
9	YDL139C	1	7	13	1619.44	5.14969E-05
10	YKL144C	4	2	8	1619.08	5.14855E-05
11	YOL116W	2	10	19	1618.65	5.14718E-05
12	YPL029W	8	16	34	1617.9	5.14479E-05
13	YJL088W	7	9	11	1617.64	5.14397E-05
14	YHR112C	3	12	17	1616.61	5.14069E-05
15	YBR167C	1	6	4	1616	5.13875E-05
16	YPL224C	2	25	15	1614.5	5.13398E-05
17	YDR357C	2	2	3	1614.48	5.13392E-05
18	YDR192C	0	0	3	1612.88	5.12883E-05
19	YBR256C	4	4	7	1610.22	5.12037E-05
20	YER030W	0	1	9	1608.68	5.11548E-05
21	YGL187C	4	4	8	1606.56	5.10873E-05
22	YPR180W	2	2	15	1603.42	5.09875E-05
23	YMR202W	2	8	4	1601.76	5.09347E-05
24	YDL170W	13	13	19	1600.16	5.08838E-05
25	YOL036W	5	15	53	1600.08	5.08813E-05
26	YML051W	2	10	15	1599.48	5.08622E-05
27	YDR428C	5	5	10	1597.95	5.08135E-05
28	YBR214W	6	14	20	1595.83	5.07461E-05
29	YAR027W	4	8	6	1595.77	5.07442E-05
30	YPL188W	4	13	19	1595.07	5.0722E-05
31	YKL138C	1	3	10	1592.52	5.06409E-05
32	YDR462W	1	3	13	1590.19	5.05668E-05
33	YDR287W	9	6	9	1589.76	5.05531E-05
34	YDL202W	1	8	10	1587.88	5.04933E-05
35	YML011C	5	2	8	1584.19	5.0376E-05
36	YPL065W	1	6	7	1583.71	5.03607E-05
37	YER032W	11	32	45	1583.56	5.0356E-05
38	YML107C	11	12	19	1582.25	5.03143E-05
39	YJR046W	7	9	35	1581.36	5.0286E-05
40	YGL098W	0	3	12	1580.99	5.02742E-05
41	YCL025C	11	13	24	1580.5	5.02587E-05
42	YLL038C	1	3	20	1580.5	5.02587E-05
43	YOL112W	7	5	30	1579.81	5.02367E-05
44	YMR104C	6	21	27	1578.7	5.02014E-05
45	YDR213W	9	18	33	1577.68	5.0169E-05
46	YNL090W	6	2	10	1576.71	5.01381E-05
47	YGR029W	6	3	10	1576.31	5.01254E-05
48	YDR380W	12	14	21	1576.16	5.01206E-05
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2	YGL257C	7	16	19	1575.33	5.00942E-05
3	YGR070W	22	38	48	1574.25	5.00599E-05
4	YGR212W	8	16	14	1573.79	5.00453E-05
5	YJR112W	4	5	10	1573.32	5.00303E-05
6	YMR098C	7	17	36	1573.32	5.00303E-05
7	YDL010W	1	3	7	1572.34	4.99992E-05
8	YJL137C	5	12	15	1570.39	4.99372E-05
9	YDR167W	0	1	10	1570.09	4.99276E-05
10	YLR068W	0	0	17	1570.04	4.9926E-05
11	YPR149W	5	3	9	1569.39	4.99054E-05
12	YOR104W	9	2	14	1568.21	4.98678E-05
13	YMR073C	4	8	9	1566.5	4.98135E-05
14	YHL027W	18	19	24	1564.8	4.97594E-05
15	YDR486C	0	1	5	1563.55	4.97197E-05
16	YAL039C	4	8	13	1561.84	4.96653E-05
17	YDR179W-	12	11	21	1560.43	4.96204E-05
18	YGR263C	9	12	15	1560.04	4.9608E-05
19	YER059W	5	8	23	1556.95	4.95098E-05
20	YJR035W	9	23	59	1553.9	4.94128E-05
21	YGR149W	7	18	20	1553.07	4.93864E-05
22	YDR026C	7	11	45	1550.65	4.93094E-05
23	YOL053W	7	16	24	1549.36	4.92684E-05
24	YKR076W	3	14	20	1548.39	4.92376E-05
25	YJL046W	5	7	15	1545.69	4.91517E-05
26	YJL024C	2	1	5	1545.27	4.91384E-05
27	YOR103C	5	2	4	1544.87	4.91256E-05
28	YCR068W	18	15	27	1544.36	4.91094E-05
29	YLR116W	9	7	36	1541.93	4.90322E-05
30	YJL127C	5	23	29	1540.99	4.90023E-05
31	YDR313C	20	12	16	1538.65	4.89279E-05
32	YER146W	0	2	3	1538.63	4.89272E-05
33	YJR052W	11	7	33	1536.68	4.88652E-05
34	YOL072W	7	15	22	1536.41	4.88566E-05
35	YIL096C	1	9	17	1535.12	4.88156E-05
36	YDR219C	4	10	28	1534.56	4.87978E-05
37	YLR177W	4	12	22	1533.81	4.87739E-05
38	YNL245C	0	0	8	1528.72	4.86121E-05
39	YEL024W	5	5	9	1526.13	4.85297E-05
40	YOR201C	4	14	15	1523.16	4.84353E-05
41	YOR245C	7	7	24	1522.57	4.84165E-05
42	YCL051W	8	15	35	1521.27	4.83752E-05
43	YHR100C	3	5	6	1516.93	4.82372E-05
44	YMR052W	1	2	10	1516.4	4.82203E-05
45	YOR036W	0	0	18	1514.93	4.81736E-05
46	YHR156C	1	12	13	1512.73	4.81036E-05
47	YMR020W	11	12	30	1512.18	4.80861E-05
48	YPL152W	6	18	13	1510.87	4.80445E-05
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2	YHR080C	4	33	62	1507.78	4.79462E-05
3	YBR204C	9	10	14	1504.56	4.78438E-05
4	YAR071W	9	9	15	1502.19	4.77685E-05
5	YLR080W	3	3	18	1501.81	4.77564E-05
6	YOL032W	0	3	7	1501.65	4.77513E-05
7	YDR411C	5	4	21	1501.19	4.77367E-05
8	YKL137W	5	1	5	1495.25	4.75478E-05
9	YIL136W	0	2	25	1494.44	4.7522E-05
10	YLR439W	3	12	20	1493.77	4.75007E-05
11	YOR253W	3	7	2	1493.33	4.74867E-05
12	YDR284C	3	9	17	1492.36	4.74559E-05
13	YNL074C	5	9	22	1492.3	4.7454E-05
14	YHR109W	8	13	28	1492.25	4.74524E-05
15	YJL126W	4	10	17	1491.68	4.74342E-05
16	YPL036W	9	13	34	1491.58	4.74311E-05
17	YER064C	4	12	26	1490.79	4.74059E-05
18	YOR034C	13	19	26	1490.41	4.73939E-05
19	YOR238W	4	6	11	1489.94	4.73789E-05
20	YBR006W	11	7	15	1488.48	4.73325E-05
21	YOL068C	11	14	18	1488.32	4.73274E-05
22	YBL038W	2	5	19	1488.15	4.7322E-05
23	YNL282W	4	4	7	1486.99	4.72851E-05
24	YNL024C-A	3	2	4	1486.71	4.72762E-05
25	YPR001W	7	13	21	1486.16	4.72587E-05
26	YNL029C	13	17	27	1485.4	4.72345E-05
27	YKL198C	12	27	34	1482.72	4.71493E-05
28	YHR101C	4	2	16	1482.18	4.71322E-05
29	YOL011W	9	8	23	1482.17	4.71318E-05
30	YGL025C	2	8	11	1481.47	4.71096E-05
31	YLL035W	6	21	26	1479.24	4.70387E-05
32	YMR263W	2	8	14	1478.61	4.70186E-05
33	YBR096W	9	3	7	1475.87	4.69315E-05
34	YLR412W	3	7	8	1474.1	4.68752E-05
35	YFL034C-B	0	12	11	1470.62	4.67646E-05
36	YOR126C	1	5	9	1469.95	4.67432E-05
37	YKR078W	5	11	27	1468.8	4.67067E-05
38	YOR324C	5	9	43	1464.82	4.65801E-05
39	YMR002W	4	3	11	1464.55	4.65715E-05
40	YAL022C	4	9	18	1462.61	4.65098E-05
41	YAL009W	2	5	24	1462.57	4.65086E-05
42	YLR451W	14	15	44	1461.49	4.64742E-05
43	YDR393W	1	7	29	1461.37	4.64704E-05
44	YPL271W	0	0	3	1459.7	4.64173E-05
45	YOR266W	4	4	18	1458.77	4.63877E-05
46	YBL107C	6	1	14	1457.47	4.63464E-05
47	YBR193C	0	5	11	1455.11	4.62713E-05
48	YJL016W	10	15	23	1452.79	4.61976E-05
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2	YMR156C	3	8	9	1450.26	4.61171E-05
3	YKR055W	6	5	13	1446.14	4.59861E-05
4	YDR482C	1	5	15	1445.59	4.59686E-05
5	YBR153W	4	6	10	1445.5	4.59658E-05
6	YLR423C	4	3	14	1444.07	4.59203E-05
7	YAL046C	2	3	6	1443.36	4.58977E-05
8	YLR107W	9	12	17	1442.86	4.58818E-05
9	YMR316W	4	9	20	1440.09	4.57937E-05
10	YER183C	5	12	12	1440.06	4.57928E-05
11	YJL162C	6	20	25	1437.82	4.57215E-05
12	YAL020C	12	11	19	1434.93	4.56296E-05
13	YOR213C	2	9	11	1434.18	4.56058E-05
14	YLR245C	9	3	7	1433.87	4.55959E-05
15	YOL102C	3	12	12	1433.26	4.55765E-05
16	YGL087C	3	3	7	1429.07	4.54433E-05
17	YGR077C	7	19	20	1426.49	4.53613E-05
18	YPL198W	0	4	15	1426.2	4.5352E-05
19	YCL008C	2	15	15	1425.91	4.53428E-05
20	YIL161W	1	3	13	1425.54	4.5331E-05
21	YJL090C	11	18	27	1423.33	4.52608E-05
22	YPL124W	0	6	27	1423.18	4.5256E-05
23	YFL030W	6	10	13	1421.91	4.52156E-05
24	YDL104C	8	10	25	1420.49	4.51705E-05
25	YIL046W	23	21	37	1418.89	4.51196E-05
26	YNL077W	18	12	21	1418.54	4.51085E-05
27	YOR256C	1	20	29	1416.97	4.50585E-05
28	YBR207W	7	6	14	1416.84	4.50544E-05
29	YMR228W	5	6	12	1414.63	4.49841E-05
30	YDL085W	2	7	23	1414.47	4.4979E-05
31	YLR064W	3	3	14	1413.42	4.49456E-05
32	YBR185C	2	5	15	1412.99	4.4932E-05
33	YOL025W	6	17	21	1412.93	4.49301E-05
34	YHR091C	6	15	37	1410.41	4.48499E-05
35	YKL087C	4	6	13	1409.98	4.48363E-05
36	YGL002W	3	4	12	1409.23	4.48124E-05
37	YHR191C	0	1	8	1406.65	4.47304E-05
38	YDL035C	11	17	36	1404.75	4.46699E-05
39	YHR132W	0	2	9	1404.25	4.4654E-05
40	YLR006C	4	15	23	1403.64	4.46346E-05
41	YER019W	10	16	29	1401.71	4.45733E-05
42	YPR133W	0	2	1	1399.09	4.449E-05
43	YMR244C	4	2	8	1397.55	4.4441E-05
44	YKL008C	4	10	23	1397.17	4.44289E-05
45	YDR105C	13	6	12	1397.14	4.44279E-05
46	YER020W	4	5	21	1396.98	4.44229E-05
47	YGR206W	3	1	5	1393.98	4.43275E-05
48	YGR098C	30	41	52	1392.89	4.42928E-05
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2	YOR052C	7	6	7	1392.33	4.4275E-05
3	YDR072C	5	19	18	1392.24	4.42721E-05
4	YLR289W	5	15	41	1392.05	4.42661E-05
5	YPR168W	0	2	10	1391.9	4.42613E-05
6	YJR119C	20	17	32	1391.78	4.42575E-05
7	YKR101W	12	9	39	1391.01	4.4233E-05
8	YDL005C	1	2	8	1390.79	4.4226E-05
9	YDL080C	11	13	22	1390.06	4.42028E-05
10	YBL081W	0	15	7	1387.89	4.41338E-05
11	YCR024C	8	14	23	1385.32	4.40521E-05
12	YNL316C	8	11	17	1383.76	4.40025E-05
13	YMR262W	9	11	15	1381.26	4.3923E-05
14	YGR026W	1	6	10	1379.6	4.38702E-05
15	YGR058W	2	11	20	1378.89	4.38476E-05
16	YLR223C	2	26	37	1378.76	4.38435E-05
17	YIL027C	1	4	2	1376.7	4.3778E-05
18	YIL007C	1	5	11	1376.15	4.37605E-05
19	YIL001W	10	9	29	1375.13	4.3728E-05
20	YLR306W	3	2	8	1373.25	4.36683E-05
21	YOR278W	3	6	14	1370.81	4.35907E-05
22	YDR045C	8	1	5	1370.73	4.35881E-05
23	YGR235C	2	3	17	1370.52	4.35815E-05
24	YLR275W	1	4	9	1368.19	4.35074E-05
25	YPR031W	25	20	32	1367.84	4.34962E-05
26	YNL014W	15	23	43	1366.46	4.34523E-05
27	YOR372C	3	6	18	1365.56	4.34237E-05
28	YLR126C	5	4	9	1362.92	4.33398E-05
29	YGL248W	7	13	16	1361.76	4.33029E-05
30	YLR361C-A	1	6	7	1361.7	4.3301E-05
31	YJR147W	5	14	15	1361.62	4.32984E-05
32	YJR053W	3	11	36	1361	4.32787E-05
33	YGR021W	2	3	11	1359.28	4.3224E-05
34	YOR054C	2	11	24	1357.63	4.31716E-05
35	YPR006C	6	13	26	1356.27	4.31283E-05
36	YKL015W	18	20	33	1353.47	4.30393E-05
37	YGL155W	17	13	16	1352.7	4.30148E-05
38	YCR043C	5	4	2	1352.17	4.29979E-05
39	YMR048W	1	7	19	1351.92	4.299E-05
40	YOR137C	10	22	30	1351.36	4.29722E-05
41	YGL089C	0	3	3	1350.38	4.2941E-05
42	YHR004C	4	11	20	1349.36	4.29086E-05
43	YJL102W	11	10	32	1348.73	4.28885E-05
44	YCR079W	9	10	22	1348.35	4.28765E-05
45	YGL041W-/	0	4	12	1348.19	4.28714E-05
46	YMR293C	6	7	19	1347.88	4.28615E-05
47	YPR057W	2	11	16	1347.75	4.28574E-05
48	YGL070C	8	3	12	1347.63	4.28536E-05
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2	YJR022W	2	1	3	1347.06	4.28354E-05
3	YMR071C	3	3	4	1346.67	4.2823E-05
4	YLR299W	6	18	26	1346.13	4.28059E-05
5	YNL056W	2	7	8	1344.46	4.27528E-05
6	YDR005C	5	3	19	1344.44	4.27521E-05
7	YKL121W	18	31	38	1343.05	4.27079E-05
8	YKL090W	3	13	16	1341.76	4.26669E-05
9	YLL003W	8	28	72	1340.45	4.26253E-05
10	YOR305W	4	6	11	1339.49	4.25947E-05
11	YFL042C	7	12	29	1337.76	4.25397E-05
12	YBL018C	2	3	6	1337.02	4.25162E-05
13	YKL061W	1	0	6	1336.6	4.25028E-05
14	YLR146C	5	7	9	1334.74	4.24437E-05
15	YHR198C	4	8	16	1334.23	4.24275E-05
16	YLR238W	5	12	24	1333.9	4.2417E-05
17	YGR169C	7	14	25	1331.67	4.23461E-05
18	YJR100C	2	8	24	1331.06	4.23267E-05
19	YPR020W	1	2	3	1329.79	4.22863E-05
20	YKL096W	0	2	2	1328.52	4.22459E-05
21	YBR254C	1	5	7	1327.5	4.22135E-05
22	YDR267C	6	9	10	1327.47	4.22125E-05
23	YBR156C	0	17	42	1326.91	4.21947E-05
24	YOR194C	2	1	7	1326.58	4.21842E-05
25	YBR129C	4	13	13	1326.5	4.21817E-05
26	YOR161C	12	10	21	1324.95	4.21324E-05
27	YDR425W	4	22	15	1324.55	4.21196E-05
28	YLL027W	5	3	15	1322.28	4.20475E-05
29	YBR104W	4	1	18	1321.06	4.20087E-05
30	YGL226C-A	1	2	0	1320.96	4.20055E-05
31	YGR112W	4	9	27	1320.59	4.19937E-05
32	YOR129C	10	18	38	1320.58	4.19934E-05
33	YHL021C	7	13	23	1320.17	4.19804E-05
34	YGL018C	1	5	9	1319.36	4.19546E-05
35	YNL125C	12	10	21	1318.66	4.19323E-05
36	YOR385W	6	9	19	1311.81	4.17145E-05
37	YMR008C	9	6	19	1311.77	4.17132E-05
38	YKR017C	27	20	18	1307.3	4.15711E-05
39	YGR138C	13	6	21	1306.43	4.15434E-05
40	YJL139C	7	9	28	1306.36	4.15412E-05
41	YGR127W	4	5	16	1305.94	4.15279E-05
42	YER026C	5	9	14	1305.7	4.15202E-05
43	YFR029W	18	18	34	1304.81	4.14919E-05
44	YBR146W	0	5	22	1304.67	4.14875E-05
45	YBR239C	17	13	27	1304.57	4.14843E-05
46	YNL147W	0	2	5	1301.98	4.14019E-05
47	YCL055W	5	12	16	1300.49	4.13546E-05
48	YGL184C	10	12	20	1299.42	4.13205E-05
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2	YGL242C	2	4	6	1298.81	4.13011E-05
3	YER072W	1	1	10	1298.14	4.12798E-05
4	YPR079W	7	12	21	1297.82	4.12697E-05
5	YPR185W	4	22	35	1297.6	4.12627E-05
6	YNR027W	6	6	11	1295.35	4.11911E-05
7	YLR067C	11	26	43	1293.12	4.11202E-05
8	YIL088C	8	5	11	1291.19	4.10588E-05
9	YPL236C	10	4	19	1289.46	4.10038E-05
10	YOR279C	0	2	32	1288.63	4.09774E-05
11	YPR047W	6	14	28	1288.48	4.09726E-05
12	YNL222W	7	4	9	1288.2	4.09637E-05
13	YNL199C	1	4	27	1287.97	4.09564E-05
14	YJR019C	1	20	15	1287.92	4.09548E-05
15	YIL045W	2	22	28	1287.57	4.09437E-05
16	YKL052C	2	12	9	1287.1	4.09288E-05
17	YJL013C	4	5	35	1287.02	4.09262E-05
18	YML119W	3	7	17	1286.37	4.09055E-05
19	YKL176C	10	13	44	1285.98	4.08931E-05
20	YOL103W	10	10	20	1283.41	4.08114E-05
21	YMR223W	26	21	10	1283.15	4.08032E-05
22	YDR370C	12	13	21	1283.03	4.07993E-05
23	YFR003C	3	5	15	1282.92	4.07958E-05
24	YIL066C	13	19	39	1281.49	4.07504E-05
25	YNL260C	1	4	11	1277.29	4.06168E-05
26	YML098W	2	1	9	1275.02	4.05446E-05
27	YGR262C	3	11	17	1273.65	4.05011E-05
28	YKL219W	9	9	16	1270.84	4.04117E-05
29	YMR147W	2	8	8	1270.76	4.04092E-05
30	YLR173W	7	14	23	1269.25	4.03611E-05
31	YLR132C	5	8	13	1268.52	4.03379E-05
32	YPR017C	6	3	6	1267.64	4.031E-05
33	YGL191W	1	7	6	1266.71	4.02804E-05
34	YHR058C	0	2	12	1265.27	4.02346E-05
35	YNL100W	2	6	13	1264.67	4.02155E-05
36	YKL084W	11	8	4	1263.69	4.01843E-05
37	YDR104C	18	34	90	1263.01	4.01627E-05
38	YGL045W	6	6	29	1261.83	4.01252E-05
39	YFL021W	8	18	22	1260.54	4.00842E-05
40	YDR282C	7	5	23	1260.1	4.00702E-05
41	YEL020W- <i>A</i>	4	1	5	1258.85	4.00304E-05
42	YGL256W	6	12	7	1258.61	4.00228E-05
43	YMR298W	5	5	6	1258.5	4.00193E-05
44	YHR090C	9	4	14	1257.93	4.00012E-05
45	YPL134C	2	4	13	1256.54	3.9957E-05
46	YLR011W	3	5	7	1256.39	3.99522E-05
47	YNL156C	7	10	14	1253.46	3.9859E-05
48	YJR148W	6	4	14	1252.9	3.98412E-05
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2	YDR331W	4	14	16	1251.41	3.97938E-05
3	YDR512C	5	2	8	1250.29	3.97582E-05
4	YDR058C	8	7	10	1248.65	3.97061E-05
5	YMR284W	4	9	29	1248.03	3.96864E-05
6	YMR171C	6	13	25	1247.64	3.9674E-05
7	YOR226C	3	6	6	1245.88	3.9618E-05
8	YDL239C	4	18	35	1241.3	3.94724E-05
9	YML052W	5	7	14	1241.27	3.94714E-05
10	YKL048C	14	11	31	1238.88	3.93954E-05
11	YHL017W	13	9	15	1238.55	3.93849E-05
12	YMR222C	1	6	5	1238.17	3.93728E-05
13	YER167W	4	23	37	1236.64	3.93242E-05
14	YLR234W	11	17	42	1236.48	3.93191E-05
15	YBR291C	4	2	14	1235.2	3.92784E-05
16	YIL056W	6	13	27	1235.02	3.92727E-05
17	YPL219W	5	11	16	1230.97	3.91439E-05
18	YHR161C	1	18	20	1228.87	3.90771E-05
19	YJR082C	0	9	3	1228.76	3.90736E-05
20	YHL010C	16	16	23	1228.37	3.90612E-05
21	YBL064C	3	3	11	1226.48	3.90011E-05
22	YLR385C	2	3	6	1225.43	3.89677E-05
23	YBR203W	11	24	64	1224.47	3.89372E-05
24	YOR148C	0	2	2	1222.46	3.88733E-05
25	YMR184W	8	2	7	1221.18	3.88326E-05
26	YDR339C	6	4	12	1218.41	3.87445E-05
27	YDR309C	1	11	20	1214.85	3.86313E-05
28	YNL254C	5	7	21	1214.84	3.8631E-05
29	YOR065W	4	8	16	1209.71	3.84678E-05
30	YNR045W	5	9	32	1208.88	3.84414E-05
31	YMR177W	5	26	19	1207.34	3.83925E-05
32	YHL048W	6	3	15	1204.79	3.83114E-05
33	YDR142C	7	10	18	1201.37	3.82026E-05
34	YKR004C	7	8	15	1200.6	3.81781E-05
35	YEL066W	0	5	8	1200.5	3.8175E-05
36	YLR118C	2	7	3	1197.64	3.8084E-05
37	YMR265C	10	16	36	1196.31	3.80417E-05
38	YDL021W	5	6	17	1195.46	3.80147E-05
39	YNL006W	7	16	18	1195.44	3.8014E-05
40	YHR057C	3	5	6	1194.82	3.79943E-05
41	YIL031W	9	25	40	1192.95	3.79349E-05
42	YPR107C	15	7	15	1192.85	3.79317E-05
43	YOL147C	3	5	14	1188.46	3.77921E-05
44	YBL006C	4	10	11	1188.28	3.77864E-05
45	YBR282W	1	2	9	1186.46	3.77285E-05
46	YOR077W	3	8	21	1186.37	3.77256E-05
47	YLR214W	17	16	31	1185.4	3.76948E-05
48	YEL063C	5	8	22	1185.1	3.76852E-05
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2	YPL005W	10	12	42	1184.18	3.7656E-05
3	YOL133W	9	4	6	1184.09	3.76531E-05
4	YGL229C	9	24	25	1183.84	3.76452E-05
5	YMR019W	23	28	51	1176.52	3.74124E-05
6	YBR114W	16	19	49	1176.35	3.7407E-05
7	YLR050C	3	4	5	1176.06	3.73978E-05
8	YFR007W	7	12	16	1173.52	3.7317E-05
9	YGR046W	2	9	17	1172.94	3.72986E-05
10	YKR065C	2	3	9	1171.09	3.72397E-05
11	YGL075C	2	5	24	1170.67	3.72264E-05
12	YNL304W	7	12	22	1169.68	3.71949E-05
13	YPR174C	2	7	17	1168.04	3.71427E-05
14	YBR152W	1	6	19	1166.17	3.70833E-05
15	YGR095C	8	3	10	1165.12	3.70499E-05
16	YOR319W	1	1	8	1164.44	3.70283E-05
17	YHL032C	12	13	37	1164.11	3.70178E-05
18	YML054C	8	9	26	1163.63	3.70025E-05
19	YIL160C	8	4	19	1162.86	3.6978E-05
20	YCL016C	4	11	17	1162.53	3.69675E-05
21	YKL107W	3	4	18	1161.77	3.69434E-05
22	YMR064W	8	14	25	1161.24	3.69265E-05
23	YDR435C	6	5	19	1159.24	3.68629E-05
24	YEL012W	1	4	4	1159	3.68553E-05
25	YGR129W	0	2	15	1158.88	3.68515E-05
26	YMR032W	4	15	41	1158.61	3.68429E-05
27	YFL027C	6	15	26	1158.37	3.68353E-05
28	YPR094W	13	2	8	1156.31	3.67697E-05
29	YPR131C	3	6	12	1155.35	3.67392E-05
30	YLR243W	5	5	7	1151.75	3.66247E-05
31	YJL056C	41	62	23	1151.66	3.66219E-05
32	YMR154C	19	14	34	1151.63	3.66209E-05
33	YML027W	3	12	29	1151.21	3.66076E-05
34	YOR106W	4	10	13	1151.18	3.66066E-05
35	YPL123C	12	10	18	1151	3.66009E-05
36	YHL008C	3	18	33	1148.08	3.6508E-05
37	YCL033C	7	6	13	1147.42	3.6487E-05
38	YBR061C	8	6	15	1145.89	3.64384E-05
39	YOR289W	4	7	11	1145.4	3.64228E-05
40	YLR099C	5	13	14	1143.52	3.6363E-05
41	YDL204W	0	12	21	1141.33	3.62934E-05
42	YOL008W	3	6	14	1140.76	3.62753E-05
43	YNL293W	8	19	35	1140.39	3.62635E-05
44	YDR421W	14	13	55	1138.3	3.6197E-05
45	YOL137W	11	10	9	1137.99	3.61872E-05
46	YHR187W	3	7	8	1137.36	3.61671E-05
47	YER079W	1	6	6	1136.06	3.61258E-05
48	YDL008W	9	7	9	1134.45	3.60746E-05
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2	YKL051W	6	11	9	1133.97	3.60594E-05
3	YBR220C	10	9	20	1133.45	3.60428E-05
4	YBR162W- <i>l</i>	0	0	3	1133.28	3.60374E-05
5	YLR094C	6	15	28	1132.56	3.60145E-05
6	YMR100W	14	11	38	1132.26	3.6005E-05
7	YIL057C	2	12	2	1128.77	3.5894E-05
8	YKL011C	8	4	15	1126.96	3.58364E-05
9	YDR067C	6	5	13	1126.55	3.58234E-05
10	YLR120C	4	6	12	1125.76	3.57983E-05
11	YIR024C	0	3	11	1125.66	3.57951E-05
12	YIL065C	2	1	11	1125.22	3.57811E-05
13	YOR363C	22	11	49	1125.2	3.57805E-05
14	YCL005W- <i>f</i>	1	1	4	1122.36	3.56902E-05
15	YDR308C	2	3	5	1120.24	3.56227E-05
16	YPL119C	4	11	44	1118.89	3.55798E-05
17	YER007W	7	8	24	1117.85	3.55467E-05
18	YGR088W	9	16	23	1116.89	3.55162E-05
19	YMR041C	8	8	17	1114.44	3.54383E-05
20	YBL040C	0	8	8	1112.39	3.53731E-05
21	YML129C	0	1	2	1112.16	3.53658E-05
22	YGR104C	2	4	10	1109.5	3.52812E-05
23	YGL194C	8	16	18	1109.49	3.52809E-05
24	YER060W	8	7	15	1108.45	3.52478E-05
25	YNL093W	4	4	11	1107.42	3.52151E-05
26	YOR368W	7	9	18	1105.12	3.51419E-05
27	YEL041W	10	9	27	1104.17	3.51117E-05
28	YOL063C	24	22	46	1103.41	3.50876E-05
29	YIL154C	5	10	23	1103.3	3.50841E-05
30	YLR104W	8	4	3	1102.47	3.50577E-05
31	YER033C	7	29	33	1101.98	3.50421E-05
32	YLL028W	12	11	20	1099.84	3.4974E-05
33	YJL045W	10	25	37	1099.25	3.49553E-05
34	YOL096C	9	9	18	1098.2	3.49219E-05
35	YJR095W	3	7	14	1097.27	3.48923E-05
36	YDR479C	2	10	26	1094.82	3.48144E-05
37	YJL066C	2	5	8	1093.48	3.47718E-05
38	YHR129C	7	2	17	1093.14	3.4761E-05
39	YJL147C	3	12	23	1093.08	3.47591E-05
40	YDL033C	6	10	26	1092.77	3.47492E-05
41	YOR269W	10	21	22	1092.32	3.47349E-05
42	YNL133C	0	0	11	1092.14	3.47292E-05
43	YPL133C	13	6	29	1091.76	3.47171E-05
44	YDR031W	8	1	6	1088.2	3.46039E-05
45	YDL119C	2	3	17	1087.26	3.4574E-05
46	YOL013C	9	14	21	1086.78	3.45587E-05
47	YOR125C	3	12	13	1086.74	3.45575E-05
48	YKL125W	10	8	25	1086.64	3.45543E-05
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2	YLR105C	5	12	25	1083.5	3.44544E-05
3	YDR265W	13	7	19	1083.14	3.4443E-05
4	YLR298C	4	12	21	1082.9	3.44354E-05
5	YPR085C	8	10	18	1082.34	3.44176E-05
6	YOL122C	15	11	21	1080.65	3.43638E-05
7	YMR114C	4	3	23	1079.96	3.43419E-05
8	YPL113C	9	9	15	1078.36	3.4291E-05
9	YML019W	7	5	6	1074.09	3.41552E-05
10	YGL126W	10	19	28	1074.01	3.41527E-05
11	YJR136C	10	7	20	1073.81	3.41463E-05
12	YLR097C	6	8	18	1073.74	3.41441E-05
13	YMR253C	2	4	18	1073.53	3.41374E-05
14	YMR053C	17	16	46	1073.47	3.41355E-05
15	YBR098W	7	13	33	1072.97	3.41196E-05
16	YPL008W	15	17	40	1072.02	3.40894E-05
17	YPL038W	5	7	13	1070.61	3.40446E-05
18	YHR122W	3	6	10	1070.49	3.40407E-05
19	YNR048W	5	6	14	1070.23	3.40325E-05
20	YBL102W	5	1	13	1066.77	3.39224E-05
21	YGL142C	4	17	27	1066.64	3.39183E-05
22	YMR280C	16	26	63	1064.69	3.38563E-05
23	YLR288C	10	13	26	1063.98	3.38337E-05
24	YNL117W	6	14	26	1062.94	3.38007E-05
25	YGR295C	6	4	18	1062.86	3.37981E-05
26	YNL214W	0	1	14	1061.15	3.37437E-05
27	YJR101W	2	7	7	1060.58	3.37256E-05
28	YMR111C	2	9	39	1059.99	3.37068E-05
29	YPL109C	9	15	36	1059.53	3.36922E-05
30	YPL002C	5	4	10	1059.38	3.36874E-05
31	YPR068C	10	14	21	1058.88	3.36715E-05
32	YNL213C	3	2	20	1058.63	3.36636E-05
33	YOR358W	2	4	16	1057.77	3.36363E-05
34	YDR132C	9	8	20	1057.51	3.3628E-05
35	YJR013W	6	8	15	1056.97	3.36108E-05
36	YDR488C	9	9	34	1056.79	3.36051E-05
37	YLR200W	1	0	7	1055.85	3.35752E-05
38	YKL108W	2	8	35	1055.82	3.35742E-05
39	YER024W	9	27	48	1054.13	3.35205E-05
40	YCL064C	8	6	12	1053.72	3.35075E-05
41	YLR392C	4	7	27	1051.51	3.34372E-05
42	YER061C	10	11	18	1050.74	3.34127E-05
43	YGR102C	2	7	10	1049.55	3.33749E-05
44	YOL017W	15	15	43	1049.04	3.33586E-05
45	YGL114W	11	7	32	1047.62	3.33135E-05
46	YLR128W	5	5	10	1047.15	3.32985E-05
47	YKR019C	4	19	45	1046.64	3.32823E-05
48	YGR174C	1	2	14	1046.23	3.32693E-05
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2	YIR030C	5	2	6	1046.07	3.32642E-05
3	YPL149W	3	5	12	1046.02	3.32626E-05
4	YBL103C	0	18	22	1045.57	3.32483E-05
5	YDR332W	10	17	35	1044.04	3.31996E-05
6	YNL311C	15	16	41	1042.26	3.3143E-05
7	YHR092C	13	5	18	1041.94	3.31329E-05
8	YGR113W	1	6	24	1039.47	3.30543E-05
9	YLR178C	2	6	3	1039.22	3.30464E-05
10	YPR124W	7	8	7	1038.39	3.302E-05
11	YJR099W	1	3	7	1037.89	3.30041E-05
12	YKR011C	6	8	11	1037.6	3.29949E-05
13	YHR050W	7	9	20	1037.36	3.29872E-05
14	YDR384C	9	2	7	1037.23	3.29831E-05
15	YGL240W	3	11	11	1036.11	3.29475E-05
16	YDL105W	1	12	27	1036.02	3.29446E-05
17	YBL059W	4	4	14	1035.73	3.29354E-05
18	YIL169C	20	10	5	1035.68	3.29338E-05
19	YKL171W	10	26	51	1034.9	3.2909E-05
20	YMR090W	2	1	10	1033.27	3.28572E-05
21	YER054C	5	13	28	1032.62	3.28365E-05
22	YPL018W	7	7	23	1032.46	3.28314E-05
23	YPL253C	6	16	26	1031.77	3.28095E-05
24	YOR097C	3	2	8	1031.64	3.28053E-05
25	YKL174C	8	13	15	1031.33	3.27955E-05
26	YIR005W	0	3	7	1031.14	3.27894E-05
27	YMR144W	3	7	14	1030.21	3.27599E-05
28	YKL124W	2	10	25	1026.82	3.26521E-05
29	YJR098C	6	15	33	1026.61	3.26454E-05
30	YDR373W	2	4	7	1025.32	3.26044E-05
31	YPR084W	4	12	19	1025.32	3.26044E-05
32	YGR014W	2	8	11	1024.08	3.25649E-05
33	YDR007W	4	3	7	1021.03	3.24679E-05
34	YIL004C	0	1	8	1020.09	3.24381E-05
35	YOL092W	5	3	8	1018.83	3.2398E-05
36	YAL010C	5	11	20	1018.16	3.23767E-05
37	YDL212W	5	5	4	1014.01	3.22447E-05
38	YDR538W	4	7	16	1013.72	3.22355E-05
39	YBL014C	6	20	43	1013.68	3.22342E-05
40	YLR079W	0	4	23	1012.15	3.21856E-05
41	YJR086W	3	1	5	1009.01	3.20857E-05
42	YDR201W	1	0	9	1006.72	3.20129E-05
43	YPR083W	6	15	26	1005.95	3.19884E-05
44	YOL073C	3	7	13	1005.12	3.1962E-05
45	YFL046W	2	7	14	1004.28	3.19353E-05
46	YMR170C	6	4	9	1002.94	3.18927E-05
47	YIL067C	15	10	28	999.491	3.1783E-05
48	YBL005W	19	21	39	998.638	3.17559E-05
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2	YLR438C-A	2	1	6	996.124	3.1676E-05
3	YJL146W	6	7	20	993.224	3.15837E-05
4	YAR033W	2	4	14	993.162	3.15818E-05
5	YKR007W	2	6	9	993.119	3.15804E-05
6	YDR323C	19	17	32	991.418	3.15263E-05
7	YML101C	1	4	8	987.221	3.13928E-05
8	YJL004C	2	3	8	986.089	3.13569E-05
9	YJL194W	6	7	26	984.488	3.13059E-05
10	YML030W	2	1	13	983.458	3.12732E-05
11	YLR014C	16	11	45	980.663	3.11843E-05
12	YDR529C	1	3	7	980.507	3.11793E-05
13	YJL187C	4	23	35	979.094	3.11344E-05
14	YFR033C	2	7	3	974.844	3.09993E-05
15	YJL196C	7	7	13	974.223	3.09795E-05
16	YLR091W	2	13	17	973.653	3.09614E-05
17	YBR258C	0	1	6	973.355	3.09519E-05
18	YKL095W	4	3	20	970.452	3.08596E-05
19	YPL013C	1	0	12	969.7	3.08357E-05
20	YIL013C	33	35	50	969.539	3.08306E-05
21	YML006C	3	23	27	969.302	3.0823E-05
22	YER034W	0	4	10	969.195	3.08196E-05
23	YNL188W	2	6	26	968.882	3.08097E-05
24	YBR091C	6	3	6	968.84	3.08083E-05
25	YPR100W	3	3	15	968.051	3.07833E-05
26	YAR035W	11	19	46	966.196	3.07243E-05
27	YIL084C	1	6	29	966.151	3.07228E-05
28	YER058W	1	3	8	965.304	3.06959E-05
29	YJL133W	7	9	7	964.425	3.0668E-05
30	YDL018C	7	7	17	962.099	3.0594E-05
31	YOL095C	9	15	23	961.62	3.05788E-05
32	YBR268W	1	2	8	961.561	3.05769E-05
33	YIL097W	7	18	17	960.404	3.05401E-05
34	YER038C	9	8	16	955.967	3.0399E-05
35	YLR265C	6	5	13	955.086	3.0371E-05
36	YER053C	8	3	7	953.881	3.03327E-05
37	YFR008W	0	6	10	951.445	3.02552E-05
38	YLR211C	1	0	9	947.027	3.01147E-05
39	YLR381W	14	20	29	946.884	3.01102E-05
40	YHR075C	4	10	15	946.69	3.0104E-05
41	YML041C	7	6	21	945.897	3.00788E-05
42	YGL079W	1	3	8	945.246	3.00581E-05
43	YOR020W-	0	1	1	943.446	3.00008E-05
44	YML104C	7	23	46	943.154	2.99916E-05
45	YER010C	3	4	9	942.052	2.99565E-05
46	YAL014C	2	4	12	941.815	2.9949E-05
47	YDR173C	2	5	16	941.714	2.99458E-05
48	YLR149C	10	21	44	939.205	2.9866E-05
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2	YDR107C	11	15	22	938.808	2.98534E-05
3	YLR229C	7	3	9	938.795	2.98529E-05
4	YKL119C	2	3	7	937.094	2.97988E-05
5	YHR059W	1	3	9	936.768	2.97885E-05
6	YDR205W	7	34	17	935.263	2.97406E-05
7	YPR026W	5	27	44	933.314	2.96786E-05
8	YOL042W	5	9	14	933.031	2.96696E-05
9	YJL133C-A	0	2	6	931.727	2.96282E-05
10	YGL117W	4	10	14	931.03	2.9606E-05
11	YKR030W	4	6	11	930.931	2.96029E-05
12	YNR007C	4	6	14	928.959	2.95402E-05
13	YIL157C	0	3	14	927.935	2.95076E-05
14	YMR168C	14	12	29	925.967	2.9445E-05
15	YMR030W	3	12	18	923.624	2.93705E-05
16	YNL080C	5	9	17	921.966	2.93178E-05
17	YBL020W	7	7	22	921.193	2.92932E-05
18	YJL100W	9	20	29	920.062	2.92572E-05
19	YDR123C	1	21	12	919.408	2.92364E-05
20	YKL130C	4	5	7	918.346	2.92027E-05
21	YJL059W	7	8	14	918.26	2.91999E-05
22	YMR097C	2	7	24	914.571	2.90826E-05
23	YDL076C	2	8	15	913.112	2.90362E-05
24	YNR032C-A	1	2	2	912.907	2.90297E-05
25	YNL094W	5	9	33	912.7	2.90231E-05
26	YIL090W	14	6	17	912.36	2.90123E-05
27	YNR032W	9	11	19	911.542	2.89863E-05
28	YGR197C	7	7	25	911.5	2.8985E-05
29	YPL193W	1	10	14	911.112	2.89726E-05
30	YBR037C	4	4	15	909.728	2.89286E-05
31	YBR223C	12	12	29	908.326	2.8884E-05
32	YNL259C	2	1	1	906.36	2.88215E-05
33	YBR105C	4	11	12	905.527	2.8795E-05
34	YDR144C	5	8	7	905.484	2.87937E-05
35	YEL019C	9	5	9	904.238	2.87541E-05
36	YNL148C	2	5	18	904.093	2.87494E-05
37	YNL164C	4	13	21	903.201	2.87211E-05
38	YNR041C	6	1	21	900.796	2.86446E-05
39	YGL250W	1	5	10	898.772	2.85802E-05
40	YOR173W	1	16	18	898.528	2.85725E-05
41	YDR084C	4	2	8	898.305	2.85654E-05
42	YLR431C	4	12	20	898.261	2.8564E-05
43	YMR299C	7	8	14	898.205	2.85622E-05
44	YDL181W	0	1	11	897.233	2.85313E-05
45	YER094C	4	2	8	895.36	2.84717E-05
46	YLR176C	13	15	24	893.701	2.8419E-05
47	YIL072W	11	6	24	892.746	2.83886E-05
48	YML050W	5	18	15	890.269	2.83099E-05
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2	YFR045W	3	4	11	889.974	2.83005E-05
3	YDR520C	16	21	37	888.339	2.82485E-05
4	YBL090W	1	1	19	886.884	2.82022E-05
5	YBR126W-,	2	4	1	886.503	2.81901E-05
6	YPL213W	2	7	20	884.614	2.813E-05
7	YKR052C	6	8	9	882.31	2.80568E-05
8	YNL202W	5	4	9	882.186	2.80528E-05
9	YLR098C	10	9	29	882.023	2.80476E-05
10	YIL087C	0	0	8	881.476	2.80302E-05
11	YLR016C	4	5	15	881.431	2.80288E-05
12	YKL160W	5	1	8	879.403	2.79643E-05
13	YBR019C	10	14	28	877.86	2.79153E-05
14	YLR212C	3	10	19	876.083	2.78587E-05
15	YPR111W	6	13	45	875.876	2.78522E-05
16	YDR469W	1	4	4	875.815	2.78502E-05
17	YLR134W	4	14	19	874.681	2.78142E-05
18	YGR055W	6	5	13	874.204	2.7799E-05
19	YGL003C	6	17	36	873.409	2.77737E-05
20	YER184C	31	11	35	871.879	2.77251E-05
21	YKL109W	2	18	16	867.372	2.75817E-05
22	YOR080W	19	11	39	867.259	2.75782E-05
23	YMR225C	0	4	4	864.783	2.74994E-05
24	YHR204W	11	20	32	863.224	2.74498E-05
25	YGL144C	2	17	26	862.2	2.74173E-05
26	YPR134W	2	5	14	859.46	2.73301E-05
27	YNR034W-,	0	2	4	858.207	2.72903E-05
28	YMR286W	0	2	5	855.733	2.72116E-05
29	YPL095C	6	16	21	855.31	2.71982E-05
30	YPR067W	4	2	10	855.064	2.71904E-05
31	YMR175W	0	3	2	854.41	2.71696E-05
32	YPL214C	15	7	16	853.305	2.71344E-05
33	YER112W	0	3	9	851.642	2.70815E-05
34	YDL110C	1	3	8	850.379	2.70414E-05
35	YOR350C	8	17	31	848.787	2.69908E-05
36	YBL082C	10	13	18	847.388	2.69463E-05
37	YER173W	11	13	35	847.269	2.69425E-05
38	YLL061W	17	8	25	845.825	2.68966E-05
39	YOR130C	6	4	8	843.186	2.68126E-05
40	YKL159C	4	5	9	843.049	2.68083E-05
41	YDR256C	5	17	26	842.722	2.67979E-05
42	YJL062W-A	0	2	3	840.919	2.67406E-05
43	YOR156C	12	19	23	840.895	2.67398E-05
44	YOR346W	22	27	47	840.747	2.67351E-05
45	YJR118C	2	2	5	839.797	2.67049E-05
46	YPL147W	6	14	54	838.693	2.66698E-05
47	YJL072C	1	7	14	837.389	2.66283E-05
48	YOR071C	15	11	15	837.184	2.66218E-05
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2	YOR328W	29	27	69	836.124	2.65881E-05
3	YOL044W	8	12	11	834.07	2.65228E-05
4	YOR002W	9	12	17	833.072	2.6491E-05
5	YPL144W	3	3	9	832.777	2.64817E-05
6	YKR075C	5	21	14	832.669	2.64782E-05
7	YNL078W	2	12	29	831.776	2.64498E-05
8	YER044C	2	3	6	831.309	2.6435E-05
9	YJR149W	5	6	16	829.891	2.63899E-05
10	YGR215W	0	1	7	828.993	2.63613E-05
11	YPR186C	20	29	23	828.938	2.63596E-05
12	YNL153C	0	0	7	827.579	2.63164E-05
13	YJL173C	3	0	5	824.582	2.62211E-05
14	YDR013W	4	2	11	824.067	2.62047E-05
15	YOR334W	6	5	21	823.741	2.61943E-05
16	YGL208W	4	8	22	821.673	2.61286E-05
17	YPR182W	1	2	4	819.087	2.60463E-05
18	YER092W	0	1	5	814.264	2.5893E-05
19	YCR075W-1	0	2	2	814.023	2.58853E-05
20	YML064C	1	5	10	813.49	2.58683E-05
21	YOL117W	9	5	38	811.957	2.58196E-05
22	YNL008C	15	16	29	811.124	2.57931E-05
23	YLR001C	11	20	32	810.574	2.57756E-05
24	YBR043C	6	10	35	809.005	2.57257E-05
25	YHR078W	7	7	15	807.518	2.56784E-05
26	YDL199C	6	14	31	806.66	2.56512E-05
27	YGL047W	6	4	9	805.024	2.55991E-05
28	YDR184C	2	11	7	804.913	2.55956E-05
29	YMR172W	2	16	36	803.781	2.55596E-05
30	YLR407W	1	3	10	803.473	2.55498E-05
31	YML099C	15	22	42	799.939	2.54374E-05
32	YDR125C	5	12	23	799.552	2.54251E-05
33	YDR079C-A	1	2	3	799.155	2.54125E-05
34	YLR363W-1	0	2	6	799.068	2.54097E-05
35	YIL077C	0	3	24	798.905	2.54045E-05
36	YCL005W	5	5	14	797.408	2.53569E-05
37	YML038C	5	7	12	797.374	2.53559E-05
38	YOL083W	7	6	8	794.49	2.52642E-05
39	YCL058W-1	1	0	6	793.915	2.52459E-05
40	YBL093C	1	3	13	793.653	2.52375E-05
41	R0010W	5	9	20	792.109	2.51884E-05
42	YAL055W	5	2	10	791.321	2.51634E-05
43	YBR161W	5	12	17	789.2	2.50959E-05
44	YBR194W	0	3	13	784.878	2.49585E-05
45	YKL218C	3	7	15	783.593	2.49176E-05
46	YHR002W	5	11	24	782.27	2.48756E-05
47	YHR051W	1	2	14	780.508	2.48195E-05
48	YNL283C	9	9	13	779.938	2.48014E-05
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2	YGR023W	3	6	7	779.848	2.47986E-05
3	YDR286C	5	5	9	778.117	2.47435E-05
4	YOL135C	2	4	9	777.189	2.4714E-05
5	YIL055C	2	16	27	774.725	2.46356E-05
6	YGL220W	3	4	8	773.929	2.46103E-05
7	YEL039C	2	3	3	773.901	2.46094E-05
8	YLR332W	3	4	11	773.747	2.46045E-05
9	YKL217W	11	9	23	772.044	2.45504E-05
10	YNL291C	15	7	12	771.439	2.45312E-05
11	YDR022C	1	2	6	770.433	2.44992E-05
12	YLR363C	6	2	11	770.154	2.44903E-05
13	YNL270C	7	3	24	764.419	2.43079E-05
14	YNL036W	9	10	5	763.739	2.42863E-05
15	YKL098W	6	9	15	763.051	2.42644E-05
16	YGR223C	8	12	28	762.883	2.42591E-05
17	YDR004W	5	9	23	762.367	2.42427E-05
18	YOR066W	3	12	24	761.08	2.42017E-05
19	YBR253W	1	1	4	758.989	2.41353E-05
20	YPL003W	9	6	20	757.594	2.40909E-05
21	YAR008W	1	7	16	756.69	2.40621E-05
22	YLR457C	2	1	39	756.384	2.40524E-05
23	YKL006W	1	0	11	756.117	2.40439E-05
24	YGR268C	8	6	18	755.645	2.40289E-05
25	YLR007W	10	8	15	755.456	2.40229E-05
26	YDR329C	4	6	17	754.39	2.3989E-05
27	YDR306C	13	10	15	754.032	2.39776E-05
28	YKL138C-A	1	2	2	751.033	2.38823E-05
29	YJR078W	10	14	26	750.816	2.38754E-05
30	YDR381C-A	1	1	9	750.795	2.38747E-05
31	YIL135C	1	15	28	749.887	2.38458E-05
32	YOR284W	3	8	10	749.231	2.3825E-05
33	YNL003C	4	3	14	745.552	2.3708E-05
34	YGL059W	5	17	20	744.771	2.36831E-05
35	YOR058C	5	14	52	744.573	2.36768E-05
36	YDL130W-/	1	2	9	744.348	2.36697E-05
37	YEL005C	5	7	5	742.422	2.36084E-05
38	YGR287C	5	14	25	739.904	2.35284E-05
39	YDL079C	9	18	23	739.001	2.34996E-05
40	YLR254C	2	2	9	738.17	2.34732E-05
41	YGR251W	0	4	10	737.586	2.34547E-05
42	YMR023C	6	8	24	736.573	2.34224E-05
43	YNL053W	4	14	20	736.281	2.34132E-05
44	YPR082C	3	4	10	735.611	2.33918E-05
45	YPL077C	0	4	23	734.537	2.33577E-05
46	YHR209W	5	4	15	734.506	2.33567E-05
47	YKL164C	4	2	3	734.251	2.33486E-05
48	YAL061W	14	18	22	733.115	2.33125E-05
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2	YOR083W	0	11	26	732.644	2.32975E-05
3	YGL090W	6	5	25	728.761	2.3174E-05
4	YPR116W	4	7	9	726.675	2.31077E-05
5	YDR065W	6	10	15	724.581	2.30411E-05
6	YNR036C	4	3	16	721.989	2.29587E-05
7	YPL268W	13	25	48	721.912	2.29562E-05
8	YHR006W	11	12	21	721.076	2.29296E-05
9	YGR141W	7	13	28	720.441	2.29095E-05
10	YOR178C	10	18	22	717.964	2.28307E-05
11	YNL050C	1	4	15	717.553	2.28176E-05
12	YHR106W	4	7	16	714.524	2.27213E-05
13	YBR022W	6	3	5	712.934	2.26707E-05
14	YER124C	15	11	9	712.038	2.26422E-05
15	YOR193W	2	6	20	711.614	2.26288E-05
16	YJR135C	0	4	12	709.428	2.25592E-05
17	Q0250	4	5	5	707.793	2.25073E-05
18	YOR092W	9	7	26	706.589	2.2469E-05
19	YDR493W	2	4	12	703.79	2.238E-05
20	YLR353W	5	16	35	702.66	2.2344E-05
21	YPL103C	14	17	26	702.18	2.23288E-05
22	YNL130C	8	11	8	701.037	2.22924E-05
23	YMR088C	9	6	19	699.937	2.22574E-05
24	YKL141W	0	5	9	699.217	2.22345E-05
25	YHR105W	3	5	13	699.176	2.22332E-05
26	YPL068C	1	11	15	699.068	2.22298E-05
27	YNL223W	12	11	20	698.836	2.22224E-05
28	YKL170W	7	1	9	698.8	2.22213E-05
29	YPR030W	11	20	65	698.498	2.22117E-05
30	YGR006W	2	7	12	696.775	2.21569E-05
31	YGL161C	2	4	12	696.438	2.21462E-05
32	YDR073W	1	2	6	695.376	2.21124E-05
33	YOR342C	2	13	17	693.086	2.20396E-05
34	YKR049C	3	2	8	691.941	2.20032E-05
35	YBR005W	1	5	16	691.483	2.19886E-05
36	YLR267W	13	9	20	690.797	2.19668E-05
37	YDR463W	11	17	20	687.754	2.187E-05
38	YOR179C	4	3	6	685.345	2.17934E-05
39	YLR459W	4	6	10	685.249	2.17904E-05
40	YDL107W	7	6	15	685.031	2.17834E-05
41	YOR006C	9	7	21	683.931	2.17485E-05
42	YLR147C	0	2	7	678.125	2.15638E-05
43	YNL101W	4	15	34	678.03	2.15608E-05
44	YNR020C	10	11	23	677.046	2.15295E-05
45	YOL009C	4	4	9	676.977	2.15273E-05
46	YNL277W	7	9	21	676.423	2.15097E-05
47	YDL227C	21	15	41	675.986	2.14958E-05
48	YOL071W	1	2	8	675.043	2.14658E-05
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2	YBR033W	25	15	46	673.986	2.14322E-05
3	YKR104W	5	5	21	672.268	2.13776E-05
4	YPR075C	8	6	14	672.267	2.13776E-05
5	YAL027W	2	8	12	672.081	2.13716E-05
6	YDL217C	2	1	5	671.323	2.13475E-05
7	YCR046C	1	2	18	670.982	2.13367E-05
8	YPL164C	16	15	38	670.749	2.13293E-05
9	YPL156C	1	5	10	670.321	2.13157E-05
10	YDR451C	6	12	21	669.331	2.12842E-05
11	YIR031C	6	15	27	669.271	2.12823E-05
12	YOR316C	5	25	11	665.498	2.11623E-05
13	YKL175W	14	32	13	665.068	2.11486E-05
14	YDR367W	5	4	5	664.458	2.11292E-05
15	YOR149C	6	16	16	664.234	2.11221E-05
16	YDR511W	0	6	8	663.881	2.11109E-05
17	YNL122C	0	7	11	663.405	2.10958E-05
18	YLR065C	2	0	11	662.704	2.10735E-05
19	YLR364W	2	2	4	661.589	2.1038E-05
20	YCR038C	7	22	30	659.584	2.09743E-05
21	YDR270W	28	12	25	658.646	2.09444E-05
22	YOR237W	3	14	18	658.443	2.0938E-05
23	YPL026C	12	16	16	658.105	2.09272E-05
24	YLR404W	5	6	13	657.05	2.08937E-05
25	YBL078C	1	1	8	656.225	2.08674E-05
26	YML081C-A	0	0	3	655.839	2.08552E-05
27	YOL158C	7	7	26	655.619	2.08482E-05
28	YJR008W	6	13	14	654.509	2.08129E-05
29	YKR058W	5	10	8	654.509	2.08129E-05
30	YDR536W	9	8	24	654.406	2.08096E-05
31	YHR176W	3	12	15	653.517	2.07813E-05
32	YDR275W	5	5	10	653.477	2.07801E-05
33	YOL048C	4	8	16	651.335	2.07119E-05
34	YHR151C	10	5	24	650.517	2.06859E-05
35	YPL209C	3	10	23	649.562	2.06556E-05
36	YKL183W	6	6	14	648.364	2.06175E-05
37	YOR147W	6	12	29	646.915	2.05714E-05
38	YMR138W	7	3	13	645.822	2.05366E-05
39	YMR281W	2	10	13	645.797	2.05358E-05
40	YCR044C	12	11	18	645.028	2.05114E-05
41	YFL059W	5	6	11	642.252	2.04231E-05
42	YOL084W	13	15	49	642.101	2.04183E-05
43	YOR221C	8	8	14	642.067	2.04172E-05
44	YDR363W-	0	0	2	641.912	2.04123E-05
45	YER175C	3	7	15	641.598	2.04023E-05
46	YOL119C	13	5	18	641.553	2.04009E-05
47	YLR137W	4	9	20	640.299	2.0361E-05
48	YDR066C	6	6	7	640.211	2.03582E-05
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2	YHR116W	4	0	10	639.291	2.03289E-05
3	YHR150W	8	12	30	639.162	2.03248E-05
4	YPR140W	2	6	28	638.032	2.02889E-05
5	YOR150W	2	7	10	637.412	2.02692E-05
6	YDL128W	3	11	7	636.37	2.02361E-05
7	YPL066W	6	9	19	635.838	2.02191E-05
8	YNL295W	4	20	39	632.567	2.01151E-05
9	YDR254W	4	11	21	632.477	2.01123E-05
10	YCL032W	7	7	18	631.102	2.00685E-05
11	YIL153W	4	19	21	631.06	2.00672E-05
12	YPR046W	0	7	9	626.654	1.99271E-05
13	YCR091W	15	21	38	625.979	1.99056E-05
14	YLL054C	13	20	37	625.806	1.99001E-05
15	YML112W	4	11	14	625.646	1.9895E-05
16	YKL003C	0	3	10	624.99	1.98742E-05
17	YLL033W	4	4	17	624.819	1.98688E-05
18	YNR055C	12	6	20	624.284	1.98517E-05
19	YNL099C	5	5	14	623.453	1.98253E-05
20	YIL049W	5	8	9	622.132	1.97833E-05
21	YIL070C	1	3	11	621.656	1.97682E-05
22	YJL193W	7	5	15	620.902	1.97442E-05
23	YDR338C	9	15	32	620.585	1.97341E-05
24	YLR170C	3	4	7	619.549	1.97012E-05
25	YGL204C	1	1	5	619.019	1.96843E-05
26	YMR096W	5	6	11	618.428	1.96655E-05
27	YJL093C	13	12	23	617.57	1.96382E-05
28	YLL002W	4	6	28	616.934	1.9618E-05
29	YGL222C	1	4	9	614.489	1.95403E-05
30	YFR043C	4	8	10	613.866	1.95205E-05
31	YLR360W	5	11	20	613.816	1.95189E-05
32	YBR299W	5	14	26	613.581	1.95114E-05
33	YBR067C	0	1	2	613.16	1.9498E-05
34	YMR021C	19	14	18	611.978	1.94604E-05
35	YIL098C	0	2	14	610.24	1.94051E-05
36	YPL234C	5	2	3	609.733	1.9389E-05
37	YOL003C	11	12	20	609.118	1.93695E-05
38	YKL188C	11	16	48	608.908	1.93628E-05
39	YGR247W	6	8	11	605.903	1.92672E-05
40	YFR036W	0	6	4	605.691	1.92605E-05
41	YOR223W	4	7	21	604.09	1.92096E-05
42	YNL230C	3	16	26	604.02	1.92074E-05
43	YDL146W	9	7	19	603.234	1.91824E-05
44	YPL081W	0	4	23	602.76	1.91673E-05
45	YKL006C-A	0	0	7	600.815	1.91054E-05
46	YDR003W	1	3	18	600.273	1.90882E-05
47	YDR079W	1	0	7	598.221	1.9023E-05
48	YDR480W	3	12	16	597.53	1.9001E-05
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2	YGR248W	6	5	7	595.735	1.89439E-05
3	YKL055C	7	3	16	595.043	1.89219E-05
4	YOR297C	2	2	6	594.101	1.88919E-05
5	YOR047C	3	8	23	593.985	1.88883E-05
6	YDR247W	12	15	13	593.945	1.8887E-05
7	YLR271W	4	3	19	593.739	1.88804E-05
8	YLR047C	12	29	41	593.142	1.88614E-05
9	YLR283W	7	7	18	591.891	1.88217E-05
10	YLR127C	12	20	35	590.763	1.87858E-05
11	YBR230C	5	6	3	590.741	1.87851E-05
12	YIL050W	5	6	7	590.544	1.87788E-05
13	YNL217W	6	10	12	590.501	1.87775E-05
14	YKL133C	5	10	23	590.163	1.87667E-05
15	YJR124C	11	8	15	589.61	1.87491E-05
16	YCR020W-I	1	1	6	588.537	1.8715E-05
17	YJL057C	12	16	33	584.57	1.85889E-05
18	YLR251W	1	4	9	583.562	1.85568E-05
19	YBR163W	7	23	20	583.202	1.85454E-05
20	YJR135W-A	4	1	3	581.178	1.8481E-05
21	YOR037W	3	9	20	581.1	1.84785E-05
22	YPL267W	1	4	15	580.99	1.8475E-05
23	YML113W	0	11	14	579.098	1.84149E-05
24	YGR121C	8	8	18	578.729	1.84031E-05
25	YLR049C	7	12	22	577.248	1.8356E-05
26	YKL072W	16	13	33	577.196	1.83544E-05
27	YDR349C	5	4	18	576.382	1.83285E-05
28	YPL072W	10	10	26	576.307	1.83261E-05
29	YHR178W	19	14	44	574.748	1.82765E-05
30	YBR188C	1	1	8	574.742	1.82763E-05
31	YGR108W	8	10	21	572.428	1.82028E-05
32	YDL188C	9	13	17	570.897	1.81541E-05
33	YHR166C	14	9	28	570.433	1.81393E-05
34	YJL103C	18	22	26	569.787	1.81188E-05
35	YHR138C	1	3	2	569.675	1.81152E-05
36	YBR070C	4	7	11	568.293	1.80713E-05
37	YPL140C	6	7	23	567.783	1.80551E-05
38	YGL127C	3	0	2	565.963	1.79972E-05
39	YPL157W	8	7	18	565.846	1.79935E-05
40	YML018C	4	7	10	563.807	1.79286E-05
41	YJR073C	4	3	7	563.702	1.79253E-05
42	YDR218C	5	9	21	561.391	1.78518E-05
43	YER074W-I	0	0	6	560.277	1.78164E-05
44	YER071C	1	2	2	559.98	1.78069E-05
45	YDR090C	8	4	11	559.705	1.77982E-05
46	YOL001W	5	9	16	559.664	1.77969E-05
47	YOL086W-I	0	1	9	558.609	1.77633E-05
48	YDL246C	6	8	10	558.578	1.77623E-05
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2	YPL196W	5	7	13	555.628	1.76685E-05
3	YBR008C	15	8	24	553.176	1.75906E-05
4	YOR059C	4	8	16	552.062	1.75551E-05
5	YMR182W-	2	1	1	551.526	1.75381E-05
6	YOL103W-/	4	12	14	551.181	1.75271E-05
7	YDR386W	12	13	33	550.284	1.74986E-05
8	YJL132W	7	19	24	549.401	1.74705E-05
9	YLR019W	4	16	14	548.962	1.74566E-05
10	YNL058C	0	7	15	548.163	1.74312E-05
11	YKL049C	0	3	25	546.426	1.73759E-05
12	YGL198W	4	5	9	546.105	1.73657E-05
13	YJR056C	3	8	19	545.61	1.735E-05
14	YCR027C	5	2	11	544.165	1.7304E-05
15	YPR166C	2	1	12	543.695	1.72891E-05
16	YNR004W	2	2	7	542.386	1.72474E-05
17	YOR120W	2	9	10	541.958	1.72338E-05
18	YIR014W	7	4	11	541.718	1.72262E-05
19	YOR025W	12	9	29	541.567	1.72214E-05
20	YNL275W	10	11	23	540.367	1.71832E-05
21	YDR414C	7	9	24	538.882	1.7136E-05
22	YGR227W	8	11	20	538.315	1.7118E-05
23	Q0055	21	30	45	538.199	1.71143E-05
24	YOR172W	19	14	39	537.677	1.70977E-05
25	YHL006C	1	3	11	536.783	1.70693E-05
26	YEL027W	6	0	4	535.899	1.70412E-05
27	YLR099W-/	0	1	4	535.522	1.70292E-05
28	YER067W	2	14	3	535.137	1.70169E-05
29	Q0065	3	8	13	534.913	1.70098E-05
30	YOR249C	12	10	25	533.895	1.69774E-05
31	YML012C-/	5	3	6	533.119	1.69528E-05
32	YPL191C	5	11	16	532.731	1.69404E-05
33	YMR068W	6	13	27	530.924	1.6883E-05
34	YGL131C	52	30	72	530.895	1.6882E-05
35	YER046W	1	3	8	530.719	1.68764E-05
36	YML118W	6	20	25	530.386	1.68659E-05
37	YKL023C-A	0	2	4	528.063	1.6792E-05
38	YNL326C	15	12	22	525.945	1.67246E-05
39	YMR069W	9	14	24	522.432	1.66129E-05
40	YFL017W-A	0	1	3	522.416	1.66124E-05
41	YMR056C	3	3	18	522.039	1.66004E-05
42	R0030W	6	1	16	520.996	1.65673E-05
43	YLR437C	0	2	10	520.679	1.65572E-05
44	YNL025C	7	13	14	519.439	1.65177E-05
45	YOR154W	9	11	27	519.279	1.65127E-05
46	YOL007C	1	7	9	518.901	1.65006E-05
47	YHR131C	13	23	72	518.58	1.64904E-05
48	YJR058C	3	5	9	518.57	1.64901E-05
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2	YDL176W	21	15	44	516.512	1.64247E-05
3	YLR151C	5	11	19	515.338	1.63873E-05
4	YER100W	1	5	11	515.294	1.63859E-05
5	YOR380W	13	22	32	514.925	1.63742E-05
6	YHR067W	7	7	20	514.247	1.63526E-05
7	YJR044C	4	5	0	511.47	1.62643E-05
8	YGL175C	5	6	22	510.966	1.62483E-05
9	YFR018C	3	15	22	510.582	1.62361E-05
10	YAL028W	4	24	21	510.103	1.62209E-05
11	YBR262C	0	2	7	510.031	1.62186E-05
12	YNL065W	15	7	25	509.644	1.62063E-05
13	YDR040C	16	22	39	508.897	1.61825E-05
14	YHL018W	1	8	7	508.087	1.61568E-05
15	YKR015C	10	12	34	507.837	1.61488E-05
16	YCR023C	10	16	30	506.836	1.6117E-05
17	YDR077W	6	1	0	504.892	1.60552E-05
18	YMR164C	1	18	20	500.471	1.59146E-05
19	YML095C	1	2	13	500.391	1.5912E-05
20	YKR077W	0	6	16	499.623	1.58876E-05
21	YPL202C	7	8	16	498.099	1.58392E-05
22	YLR035C	9	10	33	495.13	1.57447E-05
23	YDR528W	6	8	20	494.503	1.57248E-05
24	YIL099W	2	14	17	494.085	1.57115E-05
25	YMR127C	10	6	12	494.059	1.57107E-05
26	YPR010C-A	1	0	3	493.809	1.57027E-05
27	YNL327W	5	12	12	491.072	1.56157E-05
28	YCR020C-A	0	1	5	490.253	1.55897E-05
29	YOL026C	3	2	5	488.775	1.55427E-05
30	YNL200C	5	5	9	488.197	1.55243E-05
31	YIL156W-B	2	1	4	486.309	1.54642E-05
32	YER098W	16	22	36	485.366	1.54343E-05
33	YCL057C-A	0	0	5	484.49	1.54064E-05
34	YGR015C	5	11	17	483.785	1.5384E-05
35	YGR042W	1	8	18	483.087	1.53618E-05
36	YPL159C	0	8	15	482.522	1.53438E-05
37	YCR073C	14	22	64	482.09	1.53301E-05
38	YMR013C	8	8	18	481.213	1.53022E-05
39	YBR259W	6	14	31	481.001	1.52955E-05
40	YJL210W	13	6	16	479.312	1.52417E-05
41	YHR110W	4	6	10	478.924	1.52294E-05
42	YLR168C	4	5	10	478.47	1.5215E-05
43	YCL038C	5	6	15	478.306	1.52098E-05
44	YKL018C-A	1	1	12	477.637	1.51885E-05
45	YER153C	1	6	25	476.886	1.51646E-05
46	YOL113W	9	17	33	476.417	1.51497E-05
47	YOR079C	4	9	5	476.054	1.51381E-05
48	YNL086W	0	1	9	472.31	1.50191E-05
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2	YLR456W	3	6	6	471.816	1.50034E-05
3	YDR249C	4	16	19	471.789	1.50025E-05
4	YMR036C	10	17	39	471.196	1.49837E-05
5	YOL146W	1	5	4	471.123	1.49813E-05
6	YPL047W	3	2	9	470.186	1.49515E-05
7	YLR295C	1	2	6	469.499	1.49297E-05
8	YLR327C	0	4	6	468.491	1.48976E-05
9	YHR162W	2	1	10	467.168	1.48556E-05
10	YHR142W	9	4	6	466.379	1.48305E-05
11	YKR088C	1	6	16	465.963	1.48173E-05
12	YGL010W	2	7	9	464.304	1.47645E-05
13	YMR137C	14	20	29	464.069	1.4757E-05
14	YJL218W	3	3	7	462.882	1.47193E-05
15	YMR180C	6	10	24	462.563	1.47091E-05
16	YLR224W	7	10	15	461.332	1.467E-05
17	YIL122W	2	11	20	460.43	1.46413E-05
18	YEL048C	2	1	4	460.026	1.46285E-05
19	YLR356W	3	4	3	456.913	1.45295E-05
20	YHR087W	0	0	2	456.868	1.4528E-05
21	YJR054W	7	5	21	454.355	1.44481E-05
22	YPL135W	3	4	8	454.255	1.4445E-05
23	YDR503C	10	7	14	454.148	1.44415E-05
24	YDL155W	5	16	26	453.72	1.44279E-05
25	YGL163C	17	21	61	453.686	1.44269E-05
26	YDL180W	9	14	19	453.116	1.44087E-05
27	YGL085W	2	5	22	452.622	1.4393E-05
28	YKL046C	8	5	11	452.3	1.43828E-05
29	YBR062C	7	6	9	451.662	1.43625E-05
30	YNR009W	4	8	14	451.25	1.43494E-05
31	YKR039W	6	8	19	451.165	1.43467E-05
32	YMR087W	8	12	11	451.035	1.43426E-05
33	YOL020W	14	14	19	449.438	1.42918E-05
34	YNL042W	1	13	20	448.992	1.42776E-05
35	YNL165W	4	12	29	448.275	1.42548E-05
36	YLL051C	13	29	28	447.489	1.42298E-05
37	YML077W	3	3	8	444.995	1.41505E-05
38	YPL099C	0	8	14	444.934	1.41485E-05
39	YJR010C-A	3	0	3	443.96	1.41176E-05
40	YGR044C	12	13	14	443.517	1.41035E-05
41	YNR057C	3	8	4	442.782	1.40801E-05
42	YIR029W	3	13	20	442.558	1.4073E-05
43	YJL206C	17	16	36	441.274	1.40322E-05
44	YGR067C	14	22	26	439.678	1.39814E-05
45	YGL053W	4	4	7	438.91	1.3957E-05
46	YBR210W	5	1	5	438.84	1.39548E-05
47	YKR044W	3	14	23	437.633	1.39164E-05
48	YOL067C	1	1	9	436.52	1.3881E-05
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2	YMR148W	1	0	5	434.752	1.38248E-05
3	Q0085	1	4	4	434.625	1.38207E-05
4	YBR241C	8	9	16	433.373	1.37809E-05
5	YPL244C	5	4	6	432.411	1.37503E-05
6	YOL107W	3	4	15	431.09	1.37083E-05
7	YBR270C	3	15	26	430.707	1.36961E-05
8	YER093C-A	1	0	9	430.696	1.36958E-05
9	YDR410C	3	11	7	427.83	1.36047E-05
10	YGL219C	6	7	21	425.064	1.35167E-05
11	YBR115C	14	26	61	424.719	1.35057E-05
12	YLR218C	6	2	6	424.269	1.34914E-05
13	YLR390W	2	2	6	422.942	1.34492E-05
14	YDR009W	12	13	25	421.465	1.34023E-05
15	YKR069W	7	10	29	420.859	1.3383E-05
16	YFL060C	5	7	9	419.7	1.33461E-05
17	YDR397C	0	3	6	418.71	1.33146E-05
18	YPL179W	8	11	24	417.113	1.32639E-05
19	YHR123W	6	10	9	416.912	1.32575E-05
20	YJL058C	6	17	28	416.752	1.32524E-05
21	YOR028C	2	7	18	416.521	1.3245E-05
22	YKL050C	6	14	54	416.414	1.32416E-05
23	YCL049C	5	3	12	415.714	1.32194E-05
24	YIL172C	5	14	30	415.42	1.321E-05
25	YHL024W	5	22	36	414.994	1.31965E-05
26	YMR025W	4	3	10	414.978	1.3196E-05
27	YOR208W	19	14	23	414.762	1.31891E-05
28	YBR295W	42	29	55	412.803	1.31268E-05
29	YJL184W	0	1	8	409.027	1.30067E-05
30	YDL085C-A	0	0	9	408.775	1.29987E-05
31	YOL043C	12	8	24	408.696	1.29962E-05
32	YJL166W	0	2	4	408.443	1.29882E-05
33	YGL113W	7	11	47	406.184	1.29163E-05
34	YDR178W	2	3	6	405.011	1.2879E-05
35	YGL154C	8	2	8	403.363	1.28266E-05
36	YPL017C	11	10	19	402.28	1.27922E-05
37	YOR295W	2	6	12	402.195	1.27895E-05
38	YCR097W	2	4	8	402.164	1.27885E-05
39	YPL092W	10	8	12	400.87	1.27473E-05
40	YDR115W	1	1	13	400.35	1.27308E-05
41	YOL108C	0	2	11	399.724	1.27109E-05
42	YKL183C-A	2	3	2	398.232	1.26635E-05
43	YGR172C	2	6	2	397.715	1.2647E-05
44	YDL057W	9	11	18	397.648	1.26449E-05
45	YGL028C	6	4	3	396.446	1.26067E-05
46	YLR193C	0	4	11	395.556	1.25784E-05
47	YPL107W	4	4	22	395.38	1.25728E-05
48	YKL222C	16	25	38	395.301	1.25703E-05
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2	YBL095W	4	11	11	395.23	1.2568E-05
3	YMR107W	0	3	9	394.8	1.25543E-05
4	YCR003W	4	9	11	393.44	1.25111E-05
5	YNL211C	0	1	11	392.504	1.24813E-05
6	YDR179C	3	3	7	392.065	1.24674E-05
7	YIL042C	6	14	15	391.99	1.2465E-05
8	YGR239C	5	10	17	391.862	1.24609E-05
9	YMR155W	13	10	15	390.59	1.24205E-05
10	YBR111W- <i>l</i>	0	0	3	390.087	1.24045E-05
11	YMR256C	0	1	3	389.985	1.24012E-05
12	YGL162W	8	4	18	389.836	1.23965E-05
13	YMR010W	4	5	10	389.773	1.23945E-05
14	Q0045	1	16	9	388.977	1.23692E-05
15	YNL063W	8	10	22	387.616	1.23259E-05
16	YGL247W	4	4	15	387.222	1.23134E-05
17	YMR122W- <i>l</i>	0	0	0	384.147	1.22156E-05
18	YEL009C	0	4	13	384.077	1.22133E-05
19	YMR323W	7	10	17	381.564	1.21334E-05
20	YIR009W	0	2	8	381.448	1.21297E-05
21	YNL054W- <i>l</i>	14	61	73	381.251	1.21235E-05
22	YGR030C	2	3	6	379.972	1.20828E-05
23	YLR408C	2	3	7	379.571	1.20701E-05
24	YLL009C	7	1	1	377.109	1.19918E-05
25	YPL060W	3	8	24	376.485	1.19719E-05
26	YLR038C	4	3	2	375.842	1.19515E-05
27	YKL004W	7	9	8	374.254	1.1901E-05
28	YNL194C	6	5	18	373.127	1.18651E-05
29	YER170W	0	3	13	373.014	1.18616E-05
30	YLL019C	12	20	37	372.01	1.18296E-05
31	YOR162C	16	12	40	371.73	1.18207E-05
32	YOR134W	2	18	22	370.952	1.1796E-05
33	YDL129W	0	4	23	370.184	1.17716E-05
34	YKL086W	3	1	11	369.033	1.1735E-05
35	YJL048C	4	7	19	366.719	1.16614E-05
36	YLR165C	5	12	13	366.129	1.16426E-05
37	YDR314C	6	17	41	363.903	1.15718E-05
38	YMR179W	8	14	31	360.876	1.14756E-05
39	YCR061W	8	17	24	359.712	1.14386E-05
40	YOR107W	7	9	15	359.604	1.14351E-05
41	YPR011C	5	2	19	359.19	1.1422E-05
42	YOR084W	7	14	25	358.204	1.13906E-05
43	YNL314W	2	9	16	357.809	1.1378E-05
44	YDL069C	2	4	13	356.093	1.13235E-05
45	YBR230W- <i>l</i>	2	0	8	355.862	1.13161E-05
46	YJL083W	2	28	44	355.653	1.13095E-05
47	YER041W	9	17	44	355.413	1.13019E-05
48	YPL174C	8	15	31	354.404	1.12698E-05
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2	YLR350W	0	5	12	354.372	1.12687E-05
3	YER119C	10	10	16	354.202	1.12633E-05
4	YLR142W	5	9	15	353.739	1.12486E-05
5	YBR076C-A	3	3	7	353.063	1.12271E-05
6	YGR257C	9	4	19	352.836	1.12199E-05
7	YJR061W	5	25	46	352.449	1.12076E-05
8	YMR257C	14	20	43	352.12	1.11971E-05
9	YGR126W	0	12	8	349.583	1.11165E-05
10	YAL008W	1	1	10	348.685	1.10879E-05
11	YGR096W	1	7	19	348.252	1.10741E-05
12	YPR120C	6	10	25	348.044	1.10675E-05
13	YGR109W-I	20	45	98	346.859	1.10298E-05
14	YML009C	0	1	6	346.236	1.101E-05
15	YBR278W	2	4	7	346.229	1.10098E-05
16	YLR446W	11	9	12	345.939	1.10006E-05
17	YGR243W	1	4	7	345.701	1.0993E-05
18	YPL269W	3	12	33	345.473	1.09858E-05
19	YPL186C	0	7	5	344.531	1.09558E-05
20	YOR177C	9	12	18	343.124	1.09111E-05
21	YDR259C	1	10	22	341.678	1.08651E-05
22	YGL134W	10	10	15	340.276	1.08205E-05
23	YBR107C	3	3	11	337.976	1.07474E-05
24	YBR296C	5	7	16	336.47	1.06995E-05
25	YIL040W	2	2	4	334.35	1.06321E-05
26	YLR023C	8	18	24	333.139	1.05936E-05
27	YDL200C	4	4	8	332.996	1.0589E-05
28	YDL244W	10	5	11	329.264	1.04703E-05
29	YOR152C	1	1	7	324.003	1.0303E-05
30	YBR071W	1	7	11	323.937	1.03009E-05
31	YDR379C-A	0	6	6	321.362	1.02191E-05
32	YOR005C	19	20	56	319.599	1.0163E-05
33	YDR043C	7	9	15	315.166	1.0022E-05
34	YBR297W	18	13	25	314.069	9.98715E-06
35	YNL024C	6	7	8	313.84	9.97986E-06
36	YJL151C	1	6	9	312.69	9.94329E-06
37	YOR064C	9	5	12	311.448	9.9038E-06
38	YMR204C	5	9	18	311.269	9.89811E-06
39	YGR133W	6	5	10	310.531	9.87464E-06
40	YJR102C	4	1	10	310.465	9.87254E-06
41	YBR157C	2	9	16	309.668	9.8472E-06
42	YOL105C	9	6	15	306.952	9.76083E-06
43	YBR243C	10	10	16	306.148	9.73526E-06
44	YPR098C	3	3	3	304.271	9.67558E-06
45	YCR082W	1	3	5	304.08	9.6695E-06
46	YNL138W-J	0	2	9	303.935	9.66489E-06
47	YOR391C	1	6	8	301.938	9.60139E-06
48	YCL063W	5	8	29	301.515	9.58794E-06
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2	YKL043W	2	10	18	296.814	9.43845E-06
3	YMR003W	4	7	11	295.969	9.41158E-06
4	YJL051W	7	26	31	295.145	9.38538E-06
5	YOL012C	0	4	11	294.162	9.35412E-06
6	YDL045W-/	4	3	6	293.735	9.34054E-06
7	YDR387C	10	5	27	291.961	9.28413E-06
8	YMR035W	2	3	10	291.654	9.27437E-06
9	YGR008C	0	3	4	290.945	9.25182E-06
10	YFR023W	5	15	31	288.448	9.17242E-06
11	YGR110W	5	12	32	287.509	9.14256E-06
12	YOR390W	11	9	7	286.698	9.11677E-06
13	YHR194W	3	6	37	285.999	9.09454E-06
14	YDR478W	6	3	7	285.94	9.09267E-06
15	YJL097W	2	1	8	285.728	9.08592E-06
16	YJR141W	10	4	11	285.714	9.08548E-06
17	YDR315C	9	9	8	284.182	9.03676E-06
18	YGR296W	39	34	120	283.354	9.01043E-06
19	YMR150C	3	6	8	283.057	9.00099E-06
20	YDR302W	4	4	6	282.834	8.9939E-06
21	YIR032C	5	6	6	280.331	8.9143E-06
22	YDR350C	13	21	31	279.699	8.89421E-06
23	YMR174C	0	2	0	277.556	8.82606E-06
24	YOR264W	10	6	21	276.147	8.78126E-06
25	YMR159C	0	3	9	275.859	8.7721E-06
26	YNL328C	0	3	11	275.254	8.75286E-06
27	YKR013W	4	6	2	274.962	8.74357E-06
28	YCL074W	5	9	13	273.813	8.70704E-06
29	YDR126W	13	10	12	272.588	8.66808E-06
30	YDR461C-A	0	6	4	272.353	8.66061E-06
31	YOR258W	5	12	9	271.828	8.64392E-06
32	YHR096C	15	2	26	271.686	8.6394E-06
33	YPR153W	2	1	3	271.657	8.63848E-06
34	YDR352W	6	3	13	271.288	8.62674E-06
35	YGR161C	2	10	27	270.791	8.61094E-06
36	YBR255C-A	2	2	11	269.304	8.56365E-06
37	YNR064C	2	6	10	267.649	8.51103E-06
38	YBR158W	12	15	33	266.298	8.46807E-06
39	YDL183C	2	6	12	265.333	8.43738E-06
40	YMR034C	14	6	13	265.279	8.43566E-06
41	YBL021C	3	2	6	261.331	8.31012E-06
42	YDR106W	9	5	18	258.639	8.22452E-06
43	YBR173C	1	3	8	258.48	8.21946E-06
44	YIL006W	5	10	18	258.409	8.2172E-06
45	YGR038W	1	7	10	257.425	8.18591E-06
46	YHR032W	17	13	25	257.418	8.18569E-06
47	YPL171C	2	9	23	256.408	8.15357E-06
48	YIR018W	8	11	15	256.396	8.15319E-06
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2	YJL091C	9	3	16	256.315	8.15061E-06
3	YMR271C	3	2	10	256.119	8.14438E-06
4	YGL080W	1	2	3	256.065	8.14266E-06
5	YGR236C	0	1	6	255.308	8.11859E-06
6	YOR003W	6	16	12	254.084	8.07967E-06
7	YPR005C	6	10	11	252.978	8.0445E-06
8	YNL162W-/	5	0	4	251.546	7.99896E-06
9	YMR094W	6	8	30	251.056	7.98338E-06
10	YML043C	5	12	31	249.468	7.93289E-06
11	YGR201C	3	4	15	249.414	7.93117E-06
12	YDL123W	6	2	6	247.207	7.86099E-06
13	YDL067C	0	1	4	246.019	7.82321E-06
14	YHR033W	3	11	19	244.653	7.77977E-06
15	YGL116W	10	14	34	243.665	7.74835E-06
16	YLR315W	0	3	8	243.371	7.73901E-06
17	YPL148C	6	7	8	242.213	7.70218E-06
18	YPR071W	3	3	15	241.938	7.69344E-06
19	YJL065C	1	4	5	241.312	7.67353E-06
20	YLR154C	0	0	5	241.255	7.67172E-06
21	YKL187C	4	10	18	236.944	7.53463E-06
22	YHR140W	2	6	5	235.562	7.49069E-06
23	YNL092W	11	9	17	234.989	7.47246E-06
24	YNL081C	2	7	9	234.319	7.45116E-06
25	YPL014W	4	4	23	233.427	7.42279E-06
26	YGL237C	0	7	18	232.558	7.39516E-06
27	YOR348C	16	12	24	232.552	7.39497E-06
28	YOL028C	1	5	16	231.388	7.35796E-06
29	YNR066C	10	14	13	230.399	7.32651E-06
30	YBR138C	6	9	27	230.156	7.31878E-06
31	YMR274C	7	9	8	229.909	7.31092E-06
32	YLR036C	8	3	7	228.388	7.26256E-06
33	YGL226W	1	1	11	227.803	7.24396E-06
34	YHL026C	3	8	9	227.649	7.23906E-06
35	YPL071C	1	5	10	227.573	7.23664E-06
36	YKR057W	1	1	7	224.98	7.15419E-06
37	YPR003C	11	11	34	224.781	7.14786E-06
38	YPL172C	7	12	24	224.774	7.14764E-06
39	YNL019C	5	6	8	224.363	7.13457E-06
40	YAL034C	3	7	28	224.003	7.12312E-06
41	YMR136W	5	27	24	223.249	7.09914E-06
42	YOR228C	3	10	17	222.798	7.0848E-06
43	YLR210W	3	10	27	222.157	7.06442E-06
44	YEL006W	2	6	12	221.969	7.05844E-06
45	YNL305C	7	4	9	218.42	6.94558E-06
46	YBR085W	4	0	13	218.374	6.94412E-06
47	YOL075C	27	23	55	217.635	6.92062E-06
48	YPL088W	4	11	19	216.961	6.89919E-06
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2	YDL214C	13	18	36	216.714	6.89133E-06
3	YKR083C	0	0	3	216.269	6.87718E-06
4	YPR117W	18	70	121	215.799	6.86224E-06
5	YHR189W	4	6	17	215.674	6.85826E-06
6	YDR541C	3	14	13	215.148	6.84154E-06
7	YIL146C	6	10	14	214.071	6.80729E-06
8	YOR180C	4	7	4	212.96	6.77196E-06
9	YNL083W	18	8	25	212.902	6.77012E-06
10	YGL176C	9	14	26	211.876	6.73749E-06
11	YDR059C	3	3	2	211.279	6.71851E-06
12	YPL229W	3	3	6	211.11	6.71313E-06
13	YOL154W	6	6	7	210.762	6.70207E-06
14	YOR100C	3	3	10	210.516	6.69424E-06
15	YDR185C	2	5	11	210.199	6.68416E-06
16	YGR062C	2	2	21	210.123	6.68175E-06
17	YGR216C	10	11	23	210.094	6.68082E-06
18	YMR055C	6	3	16	209.769	6.67049E-06
19	YPL087W	4	7	10	208.393	6.62673E-06
20	YJR126C	3	24	44	208.028	6.61513E-06
21	YDR030C	10	8	31	207.957	6.61287E-06
22	YLR390W- <i>f</i>	8	2	1	207.405	6.59532E-06
23	YJL116C	10	4	3	207.135	6.58673E-06
24	YCR020C	6	6	8	206.57	6.56876E-06
25	YML068W	31	8	23	206.524	6.5673E-06
26	YLR121C	4	5	12	205.753	6.54278E-06
27	YLR376C	4	2	13	204.911	6.51601E-06
28	YOR033C	16	12	42	204.731	6.51028E-06
29	YPL230W	4	15	20	204.259	6.49527E-06
30	YKL044W	1	4	7	203.79	6.48036E-06
31	YPL257W	2	5	8	203.168	6.46058E-06
32	YOR159C	1	0	1	202.981	6.45464E-06
33	YDR018C	7	8	17	201.102	6.39488E-06
34	YDL216C	7	10	28	200.683	6.38156E-06
35	YGR101W	3	6	18	198.264	6.30464E-06
36	YLR205C	3	6	16	196.604	6.25185E-06
37	YLR273C	9	14	18	196.39	6.24505E-06
38	YBR290W	1	8	11	195.959	6.23134E-06
39	YHR184W	4	9	23	195.071	6.2031E-06
40	YPL166W	1	4	7	194.918	6.19824E-06
41	YKL162C	8	7	16	193.627	6.15719E-06
42	YLR073C	3	2	10	191.332	6.08421E-06
43	YJR036C	24	19	53	190.393	6.05435E-06
44	YDL177C	5	5	9	189.547	6.02744E-06
45	YHR199C-A	0	1	6	188.866	6.00579E-06
46	Q0255	4	5	12	187.847	5.97339E-06
47	YDR151C	9	5	11	187.722	5.96941E-06
48	YKL163W	4	2	4	187.497	5.96226E-06
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2	Q0060	3	6	14	186.712	5.93729E-06
3	YFR017C	2	7	15	186.152	5.91949E-06
4	YGR057C	5	7	13	185.751	5.90674E-06
5	YKL053C-A	4	0	1	183.645	5.83977E-06
6	YDL206W	13	15	30	183.443	5.83334E-06
7	YDL194W	7	14	34	183.389	5.83163E-06
8	YPR007C	5	11	33	182.452	5.80183E-06
9	YPL189C-A	1	3	3	181.975	5.78666E-06
10	YNL195C	4	11	12	180.377	5.73585E-06
11	YJL161W	1	5	5	178.788	5.68532E-06
12	YMR319C	9	10	30	178.172	5.66573E-06
13	YPR109W	2	2	16	178.131	5.66443E-06
14	YGL179C	10	11	25	175.928	5.59437E-06
15	YLR394W	10	14	28	175.348	5.57593E-06
16	YHR001W-	0	3	2	175.347	5.5759E-06
17	YKL071W	1	4	6	174.281	5.542E-06
18	YBR058C-A	1	3	2	173.974	5.53224E-06
19	YLR320W	19	32	68	171.951	5.46791E-06
20	YLR426W	11	3	22	170.64	5.42622E-06
21	YCR075C	5	6	10	170.579	5.42428E-06
22	YGL128C	2	15	14	168.546	5.35963E-06
23	YDR456W	7	8	17	167.661	5.33149E-06
24	YER037W	3	7	11	166.734	5.30201E-06
25	YIL071C	10	9	14	165.518	5.26334E-06
26	YLR102C	6	10	19	163.557	5.20098E-06
27	YDR119W-	1	0	7	163.489	5.19882E-06
28	YMR042W	1	2	11	162.311	5.16136E-06
29	YGR168C	4	11	18	161.888	5.14791E-06
30	YOL159C-A	4	3	4	161.044	5.12107E-06
31	YMR040W	1	0	14	160.842	5.11465E-06
32	YHR032W-	1	6	4	160.304	5.09754E-06
33	YMR200W	3	3	10	160.065	5.08994E-06
34	YLL042C	3	5	6	159.692	5.07808E-06
35	YOL077W-	0	3	0	159.092	5.059E-06
36	YBR228W	11	13	20	159.047	5.05757E-06
37	YPL223C	0	4	12	158.742	5.04787E-06
38	YER181C	3	4	4	158.419	5.0376E-06
39	YMR043W	1	10	8	157.367	5.00415E-06
40	Q0110	7	9	10	155.417	4.94214E-06
41	YBR093C	10	9	14	155.029	4.9298E-06
42	YGR288W	19	11	25	154.934	4.92678E-06
43	YEL070W	7	13	20	154.094	4.90007E-06
44	YLR242C	8	7	9	153.92	4.89453E-06
45	YJR039W	27	21	44	153.339	4.87606E-06
46	YIR017C	0	1	15	152.617	4.8531E-06
47	YKR022C	2	6	16	152.163	4.83866E-06
48	YPL046C	0	1	3	151.66	4.82267E-06
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2	YNL038W	2	2	18	151.128	4.80575E-06
3	YNR059W	9	13	30	150.158	4.77491E-06
4	YJL134W	13	10	23	148.395	4.71884E-06
5	YIR015W	4	5	11	147.906	4.70329E-06
6	YPR093C	16	12	20	147.571	4.69264E-06
7	YDL054C	7	10	13	147.313	4.68444E-06
8	YPR066W	16	4	7	146.873	4.67045E-06
9	YBR148W	6	12	23	145.83	4.63728E-06
10	YJL023C	3	4	18	145.805	4.63648E-06
11	YAR028W	3	6	4	145.269	4.61944E-06
12	YOR344C	0	3	11	145.212	4.61763E-06
13	YBR217W	3	3	9	144.069	4.58128E-06
14	YNL336W	10	3	14	143.924	4.57667E-06
15	YIL008W	0	3	2	143.333	4.55788E-06
16	YOR192C-B	15	61	75	142.057	4.5173E-06
17	YDL218W	6	6	17	140.324	4.46219E-06
18	YDR343C	11	6	20	140.152	4.45672E-06
19	YLR145W	5	3	17	140.038	4.4531E-06
20	YDR441C	1	6	5	140.033	4.45294E-06
21	YGR053C	7	8	14	139.098	4.42321E-06
22	YOR060C	3	3	18	138.061	4.39023E-06
23	YKR098C	12	23	34	137.464	4.37125E-06
24	YBR066C	8	10	14	137.373	4.36835E-06
25	YJL163C	10	13	22	137.037	4.35767E-06
26	YKL093W	12	5	18	136.783	4.34959E-06
27	YKL026C	6	3	5	134.966	4.29181E-06
28	YLL049W	5	1	7	134.954	4.29143E-06
29	YCL056C	5	2	6	133.801	4.25477E-06
30	YGL063W	11	11	28	132.358	4.20888E-06
31	YPR101W	1	2	15	132.135	4.20179E-06
32	YBR168W	5	9	20	130.988	4.16531E-06
33	YMR166C	2	9	20	130.855	4.16109E-06
34	YBR201W	3	3	8	130.744	4.15756E-06
35	YJL089W	15	14	20	130.407	4.14684E-06
36	YPR138C	11	10	13	130.307	4.14366E-06
37	YGR036C	5	4	10	128.139	4.07472E-06
38	YDL012C	5	1	2	128.128	4.07437E-06
39	YCR028C	9	10	25	126.939	4.03656E-06
40	YMR187C	17	9	18	126.142	4.01122E-06
41	YMR126C	6	11	20	126.08	4.00924E-06
42	YCR021C	8	8	11	125.848	4.00187E-06
43	YMR292W	0	1	6	125.463	3.98962E-06
44	YBL031W	0	12	24	125.285	3.98396E-06
45	YBR047W	1	7	9	125.19	3.98094E-06
46	YMR118C	0	7	10	123.975	3.94231E-06
47	YBL029C-A	5	3	3	122.198	3.8858E-06
48	YER104W	2	6	19	120.082	3.81851E-06
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2	YBL049W	7	5	9	119.164	3.78932E-06
3	YBL089W	10	12	18	116.682	3.7104E-06
4	YPL057C	7	9	16	116.255	3.69682E-06
5	YNL284C-B	16	63	77	116.024	3.68947E-06
6	YDL233W	2	6	18	114.016	3.62562E-06
7	YHR177W	5	18	27	110.673	3.51931E-06
8	YGR075C	4	7	5	108.725	3.45737E-06
9	YGR016W	4	3	11	108.473	3.44936E-06
10	YLR246W	11	15	21	107.791	3.42767E-06
11	YPL177C	3	6	17	106.027	3.37157E-06
12	YEL064C	11	11	17	105.228	3.34617E-06
13	YLR312C	4	13	29	105.148	3.34362E-06
14	YDL048C	13	26	20	103.199	3.28165E-06
15	YJL216C	7	14	23	103.105	3.27866E-06
16	YLR135W	6	6	30	103.03	3.27627E-06
17	YEL065W	11	14	22	101.472	3.22673E-06
18	YDL222C	5	3	14	99.883	3.1762E-06
19	YGL186C	13	10	21	99.644	3.1686E-06
20	YPR169W-/	2	2	3	98.298	3.1258E-06
21	YGR183C	0	1	2	98.043	3.11769E-06
22	YLR281C	3	3	24	95.518	3.0374E-06
23	YMR095C	6	8	9	95.356	3.03225E-06
24	YPL167C	30	36	77	95.098	3.02404E-06
25	YJL035C	7	8	12	93.396	2.96992E-06
26	YDR336W	6	7	14	93.111	2.96086E-06
27	YHL040C	10	11	26	91.916	2.92286E-06
28	YMR199W	9	12	20	88.317	2.80841E-06
29	YIL101C	8	20	30	87.97	2.79738E-06
30	YHL047C	9	6	26	87.912	2.79553E-06
31	YLR453C	5	9	13	87.691	2.7885E-06
32	YHR053C	12	1	0	87.506	2.78262E-06
33	YHR152W	1	5	9	87.236	2.77404E-06
34	YJL025W	10	14	30	86.366	2.74637E-06
35	YIL132C	2	2	13	85.114	2.70656E-06
36	YGL121C	0	3	10	84.704	2.69352E-06
37	YBL071W-/	4	1	1	84.44	2.68513E-06
38	YKL065W-/	0	1	5	84.41	2.68417E-06
39	YDR501W	8	9	25	84.063	2.67314E-06
40	YPL216W	22	20	51	83.18	2.64506E-06
41	YMR181C	1	1	2	82.64	2.62789E-06
42	YOL110W	5	8	18	82.35	2.61866E-06
43	YDL142C	3	2	16	81.829	2.6021E-06
44	YDR085C	7	17	40	81.264	2.58413E-06
45	YBR285W	3	3	10	81.209	2.58238E-06
46	YER116C	9	7	17	80.693	2.56597E-06
47	YPL158C	4	9	48	79.848	2.5391E-06
48	YFL061W	3	6	13	79.769	2.53659E-06
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2	YLR164W	3	6	7	78.642	2.50075E-06
3	YPL183W- <i>f</i>	4	2	10	77.679	2.47013E-06
4	YNL237W	14	13	20	76.671	2.43808E-06
5	YMR182C	4	9	13	76.501	2.43267E-06
6	YIL023C	4	20	7	76.119	2.42052E-06
7	YEL004W	9	7	12	75.908	2.41381E-06
8	YHR139C	2	3	5	74.906	2.38195E-06
9	YOL159C	5	3	6	73.522	2.33794E-06
10	YNL146W	0	3	5	73.298	2.33082E-06
11	YER119C-A	3	1	10	73.245	2.32913E-06
12	YOR019W	6	15	36	71.886	2.28592E-06
13	YAR066W	0	1	2	71.433	2.27151E-06
14	YDR277C	4	9	27	70.839	2.25262E-06
15	YNR002C	4	3	7	67.787	2.15557E-06
16	YPL054W	8	9	8	66.503	2.11474E-06
17	YLR141W	5	13	37	66.041	2.10005E-06
18	YIL024C	4	5	7	64.429	2.04879E-06
19	YBR269C	1	1	12	64.329	2.04561E-06
20	YER179W	6	6	19	62.819	1.99759E-06
21	YER158C	4	10	40	62.714	1.99426E-06
22	YBR032W	2	2	4	62.273	1.98023E-06
23	YLR070C	7	9	11	62.035	1.97266E-06
24	YKR045C	1	4	18	61.588	1.95845E-06
25	YLR152C	11	7	21	61.003	1.93985E-06
26	YMR194C-I	8	1	2	60.305	1.91765E-06
27	YJL185C	4	7	24	60.018	1.90852E-06
28	YOR382W	0	0	1	59.572	1.89434E-06
29	YDL120W	2	5	9	59.504	1.89218E-06
30	YJL079C	4	6	2	59.174	1.88169E-06
31	YPL248C	18	17	36	58.918	1.87355E-06
32	YNL176C	2	5	19	58.019	1.84496E-06
33	YKR041W	3	8	23	54.937	1.74695E-06
34	YIL134W	2	6	14	54.628	1.73713E-06
35	YDL151C	5	0	6	50.76	1.61413E-06
36	YNL294C	8	13	33	50.302	1.59956E-06
37	Q0070	7	15	18	49.199	1.56449E-06
38	YPL264C	5	6	12	48.365	1.53797E-06
39	YJL182C	0	3	6	46.797	1.48811E-06
40	YGL146C	4	5	14	46.646	1.48331E-06
41	YHR160C	3	7	11	45.783	1.45586E-06
42	YGR144W	6	12	9	43.199	1.37369E-06
43	YDL169C	1	7	14	40.592	1.29079E-06
44	YHR134W	3	10	19	40.45	1.28628E-06
45	YBR016W	5	3	3	40.298	1.28144E-06
46	YGL104C	11	8	20	40.243	1.2797E-06
47	YDR260C	0	6	13	40.113	1.27556E-06
48	YJL199C	1	2	10	40.039	1.27321E-06
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2	YFL011W	12	2	25	39.352	1.25136E-06
3	YBR050C	7	9	20	38.536	1.22541E-06
4	YHR136C	2	5	9	38.094	1.21136E-06
5	YIR039C	6	1	4	37.337	1.18729E-06
6	YMR206W	7	15	19	35.284	1.122E-06
7	YJL003W	1	1	10	34.987	1.11256E-06
8	YDR070C	0	2	9	34.863	1.10862E-06
9	YNL204C	9	3	21	34.013	1.08159E-06
10	YMR059W	2	3	7	33.904	1.07812E-06
11	YHL009W-/	10	7	23	33.617	1.06899E-06
12	YGL096W	0	8	18	33.595	1.06829E-06
13	YPR198W	11	9	7	33.516	1.06578E-06
14	YOR190W	7	13	16	33.045	1.0508E-06
15	YLR395C	2	2	5	32.243	1.0253E-06
16	YKL208W	3	6	16	32.005	1.01773E-06
17	Q0275	2	15	7	31.891	1.01411E-06
18	YMR163C	13	16	40	31.685	1.00756E-06
19	YOL136C	8	12	14	31.545	1.00311E-06
20	YPL201C	5	15	13	31.181	9.91531E-07
21	YIL120W	12	10	26	30.103	9.57252E-07
22	YOR384W	12	24	34	29.971	9.53054E-07
23	YPR188C	0	2	5	29.352	9.3337E-07
24	YJR154W	9	15	12	29.154	9.27074E-07
25	YCR007C	3	4	7	28.888	9.18616E-07
26	YPR167C	2	10	8	28.253	8.98423E-07
27	YIR016W	5	9	20	26.771	8.51297E-07
28	YDL049C	3	4	11	24.985	7.94503E-07
29	YLR004C	14	9	15	24.49	7.78763E-07
30	YIL158W	2	2	11	24.105	7.6652E-07
31	YPR061C	5	10	13	23.785	7.56344E-07
32	YMR081C	6	17	20	23.571	7.49539E-07
33	YOL114C	5	2	13	23.526	7.48108E-07
34	YML123C	12	18	20	22.774	7.24195E-07
35	YPR036W-/	0	1	3	22.677	7.21111E-07
36	YJR012C	5	5	7	21.265	6.7621E-07
37	YEL059C-A	4	1	4	20.744	6.59643E-07
38	YLR443W	6	7	21	19.806	6.29815E-07
39	YER045C	8	16	15	18.42	5.85741E-07
40	YDR320C-A	1	2	3	18.052	5.74039E-07
41	YDR082W	8	11	18	17.564	5.58521E-07
42	YPR121W	22	11	21	17.31	5.50444E-07
43	YGL170C	3	11	18	16.463	5.2351E-07
44	YDL231C	18	30	66	16.015	5.09264E-07
45	YPR193C	1	2	6	15.855	5.04176E-07
46	YGL166W	12	8	16	15.228	4.84238E-07
47	YKL156W	5	3	4	14.367	4.56859E-07
48	YOL157C	5	14	29	13.16	4.18478E-07
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2	YPR009W	11	3	14	13.026	4.14217E-07
3	YER076C	9	6	10	12.604	4.00797E-07
4	YDL020C	6	18	21	11.309	3.59617E-07
5	YML087C	5	11	11	10.71	3.4057E-07
6	YLR110C	3	2	0	10.542	3.35227E-07
7	YER121W	0	3	6	9.96	3.1672E-07
8	YPR151C	0	5	16	9.836	3.12777E-07
9	YPL034W	4	6	7	9.472	3.01202E-07
10	YGR142W	5	7	19	8.61	2.73791E-07
11	YKR105C	9	7	14	7.869	2.50228E-07
12	YJR106W	14	15	25	6.96	2.21323E-07
13	YPL189W	9	12	33	6.509	2.06981E-07
14	YHR044C	3	3	8	6.351	2.01957E-07
15	YJL127C-B	1	1	3	6.067	1.92926E-07
16	YIL152W	1	12	10	5.562	1.76867E-07
17	YPL076W	2	1	11	5.509	1.75182E-07
18	YDL024C	10	8	20	5.085	1.61699E-07
19	YOR393W	7	10	17	5.058	1.6084E-07
20	YOL132W	9	11	12	1.723	5.479E-08
21	YMR251W	5	11	24	0	0
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1	relCys	relHis	relArg	sum1Cys	sum1His	sum1Arg	relCys
2	0.011948	0.047793	0.065716	6.782461	13.56706253	29.49972	0.021994
3	0.039735	0.039735	0.136235	aCys	bHis	cArg	0.06193
4	0.077815	0.124504	0.233445	0.0066	0.0663	0.1607	0.136515
5	0.032883	0.051673	0.084556	sum2Cys	sum2His	sum2Arg	0.000877
6	0.017205	0.051616	0.06452	2.228283	0.013815631	0.038852	0.004278
7	0.004036	0.044394	0.056502	xCys	yHis	zArg	0.001934
8	0.031646	0.063293	0.162187	0.002168	6.75147E-05	0.000212	0.035203
9	0.003925	0.039253	0.054955				0.002792
10	0.03638	0.109139	0.240105	119	4	2 total	0.002106
11	0.010587	0.017645	0.091753	0.10084		IronIII	0.034715
12	0.00352	0.028161	0.045762	0.193277	0.5	Haem a	7.97E-05
13	0.010462	0.017437	0.101137	0.008403		Haem c	0.001877
14	0.052131	0.135539	0.253702	0.05042		Ferrohaem b	
15	0	0.01371	0.092544	0.008403		Sirohaem	0.002963
16	0.036877	0.162875	0.374919	0.386555		1 4Fe-4S	
17	0	0.011635	0.034904	0.252101	0.5	2Fe-2S	0.001118
18	0.025365	0.056368	0.129646				7.49E-05
19	0.024607	0.038278	0.090226	0.000219	0	0 IronIII	
20	0.021559	0.026949	0.021559	0.000419	3.37574E-05	0 Haem a	
21	0.007957	0.031826	0.087523	1.82E-05	0	0 Haem c	0.022675
22	0.060375	0.1155	0.270374	0.000109	0	0 Ferrohaem b	0.002908
23	0.032739	0.050367	0.103253	1.82E-05	0	0 Sirohaem	0.020763
24	0.012515	0.030035	0.065076	0.000838	0	0.000212 4Fe-4S	0.001012
25	0.012053	0.028927	0.024106	0.000547	3.37574E-05	0 2Fe-2S	0.228625
26	0.009599	0.045596	0.105591				
27	0.02823	0.072927	0.155263			0.000219 IronIII	0.074217
28	0.004555	0.038721	0.075165			0.000453 Haem a	0.214782
29	0.088252	0.178766	0.441259			1.82E-05 Haem c	0.329738
30	0	0.008628	0.028041			0.000109 Ferrohaem b	0.045351
31	0.015023	0.034338	0.075115			1.82E-05 Sirohaem	0.034224
32	0.079705	0.10068	0.213945			0.00105 4Fe-4S	0.00034
33	0.02514	0.0419	0.100559			0.00058 2Fe-2S	0.036024
34	0.018527	0.032936	0.072048				0.038852
35	0.00396	0.00594	0.015839				0.077704
36	0.023667	0.039446	0.108476				
37	0.051264	0.06901	0.216888				0.007629
38	0.021264	0.03093	0.028997				0.01964
39	0.001929	0.003858	0.038585				0.007992
40	0.024455	0.045148	0.079008				
41	0.001836	0.033044	0.10831				
42	0.021924	0.042022	0.089524				0.016963
43	0	0.007302	0.043809				0.004542
44	0.001814	0.010887	0.027217				
45	0.012557	0.025113	0.064577				0.018878
46	0.01076	0.077111	0.116562				0.063298
47	0.005246	0.008743	0.045465				0.065215
48	0.001722	0.012055	0.025831				0.028053

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2	0.020436	0.032357	0.066418	0.002043
3	0.003405	0.011916	0.017023	0.021408
4	0.001692	0.005075	0.0203	0.050793
5	0.006751	0.016877	0.030379	0.071842
6	0.01508	0.025134	0.051943	0.04052
7	0.016725	0.036795	0.04014	0.301602
8	0.004944	0.014833	0.036257	0.009268
9	0.001609	0.016094	0.035406	0.003904
10	0.012795	0.031988	0.033587	0.003524
11	0.001549	0.015493	0.038732	0.005851
12	0.036855	0.056818	0.121315	0.003915
13	0.001489	0.002978	0.041691	0.045729
14	0.004435	0.007392	0.038437	
15	0.011795	0.013269	0.025064	
16	0.015997	0.024723	0.047992	
17	0.002898	0.007245	0.020286	
18	0.005767	0.007208	0.027392	
19	0	0.025444	0.014136	
20	0.005624	0.043585	0.056238	
21	0.023888	0.088526	0.105388	
22	0.019368	0.041504	0.07194	
23	0.002766	0.023512	0.030427	
24	0.008251	0.015126	0.009626	
25	0.00822	0.017811	0.049322	
26	0.013662	0.016395	0.028691	
27	0.010887	0.035384	0.057159	
28	0.010826	0.021652	0.060896	
29	0	0.004049	0.017547	
30	0.001328	0.006642	0.014613	
31	0.006628	0.010605	0.063632	
32	0.009213	0.028955	0.053962	
33	0.027601	0.046002	0.10909	
34	0.005256	0.014455	0.067018	
35	0.001314	0.002627	0.010509	
36	0.028638	0.031241	0.067689	
37	0	0.012987	0.015585	
38	0.003892	0.00519	0.031137	
39	0.009077	0.005187	0.022044	
40	0.005161	0.018062	0.07354	
41	0.006409	0.021789	0.025634	
42	0.003801	0.007603	0.012671	
43	0	0.012513	0.032534	
44	0.011262	0.016267	0.032533	
45	0.001242	0.002484	0.002484	
46	0.009824	0.013508	0.009824	
47	0.020754	0.040287	0.096445	
48	0	0.004869	0.031645	
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2	0.013344	0.023049	0.063083
3	0.004828	0.006035	0.026555
4	0	0.004811	0.018039
5	0.005948	0.002379	0.011897
6	0.010644	0.026019	0.07096
7	0.009423	0.024734	0.101293
8	0.005873	0.007048	0.01762
9	0.004695	0.016433	0.016433
10	0.001158	0.009267	0.023166
11	0	0.002301	0.013807
12	0	0.009094	0.012504
13	0	0.007874	0.031494
14	0.015671	0.01903	0.047014
15	0.003337	0.003337	0.001112
16	0	0.002177	0.010885
17	0	0.007614	0.017403
18	0.024914	0.041163	0.057411
19	0.009649	0.010722	0.028948
20	0.001071	0.003214	0.002142
21	0.001066	0.001066	0.018122
22	0.00746	0.013854	0.053284
23	0	0.003196	0.011718
24	0	0.00106	0.044516
25	0.008461	0.023268	0.026441
26	0.004221	0.008442	0.018995
27	0.013682	0.022101	0.046307
28	0.003134	0.013583	0.032389
29	0.00311	0.049764	0.060131
30	0.010356	0.01657	0.034175
31	0	0.001033	0.007229
32	0.008251	0.012377	0.038162
33	0.005153	0.013398	0.018552
34	0	0.006184	0.020612
35	0	0.008186	0.022511
36	0.009182	0.023465	0.061212
37	0.003057	0.008151	0.024454
38	0.0071	0.033473	0.075061
39	0.026244	0.034319	0.085797
40	0.011074	0.007047	0.019128
41	0.019084	0.055244	0.121537
42	0	0.001003	0.014044
43	0.000999	0.011989	0.018982
44	0.001996	0.00499	0.003992
45	0.01795	0.029916	0.071798
46	0.002989	0.013947	0.027895
47	0.00996	0.019921	0.036853
48	0.007938	0.028774	0.04068
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2	0.000991	0.00694	0.032719
3	0.000988	0.006919	0.025701
4	0.011736	0.023473	0.056726
5	0.000972	0.005835	0.021394
6			
7	0.00966	0.008694	0.025117
8	0	0.001928	0.005783
9	0.003842	0.001921	0.008645
10	0.01343	0.008633	0.031656
11	0.000959	0.00671	0.015336
12			
13	0.015289	0.021978	0.065934
14	0.008597	0.008597	0.048717
15	0.010469	0.012373	0.022842
16	0.00095	0.005698	0.005698
17	0.005698	0.006647	0.018043
18	0.033937	0.067874	0.148003
19			
20	0.004703	0.001881	0.026337
21	0.028146	0.080687	0.062861
22	0.002805	0.00561	0.00561
23			
24	0.00373	0.005594	0.024242
25	0.004659	0.023296	0.046592
26	0.010235	0.027912	0.051173
27	0.01018	0.026838	0.036092
28	0.010162	0.00739	0.024018
29			
30	0.001843	0.003685	0.004607
31	0.019325	0.052454	0.11779
32	0	0.000918	0.018369
33	0.005489	0.014637	0.021956
34	0.002737	0.010036	0.010036
35			
36	0.007287	0.010931	0.030061
37	0.006369	0.017286	0.025474
38	0.002725	0.007268	0.012719
39	0.001794	0.005383	0.014355
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41	0.000895	0.00179	0.008056
42	0	0.003548	0.016851
43	0.003539	0.002654	0.023005
44	0.006149	0.007906	0.018446
45	0.003513	0.007026	0.037763
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47	0.012288	0.025455	0.05442
48	0	0.002633	0.02633
49	0.002631	0.006138	0.004384
50	0.003506	0.014024	0.008765
51	0.005245	0.019231	0.027098
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53	0.007866	0.013109	0.021849
54	0.020077	0.02706	0.036663
55	0.002618	0.010473	0.03142
56	0.002612	0.018283	0.033084
57			
58	0.0052	0.013	0.032933
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2	0.007797	0.017327	0.024257
3	0.000865	0.010374	0.010374
4	0.024181	0.02159	0.058724
5	0.001724	0.008622	0.037937
6	0.000857	0.012849	0.046255
7	0.005123	0.008538	0.018784
8	0	0.002545	0.005089
9	0.016011	0.022753	0.037079
10	0.004207	0.009255	0.012621
11	0.00084	0.004198	0.010076
12	0.000838	0.002513	0.015079
13	0.005005	0.006673	0.019184
14	0.004943	0.018949	0.044489
15	0.005758	0.018097	0.02221
16	0.009861	0.024653	0.053415
17	0.00082	0.003278	0.013933
18	0.004059	0.01299	0.018673
19	0.005671	0.009721	0.035645
20	0.004035	0.006456	0.017754
21	0.00482	0.003213	0.015263
22	0.000802	0.004812	0.016843
23	0.001602	0.010413	0.024832
24	0.005597	0.009594	0.012792
25	0.029543	0.066273	0.133345
26	0	0.011168	0.01037
27	0.004763	0.008732	0.019846
28	0.003173	0.007138	0.029346
29	0.002361	0.011806	0.047224
30	0.002361	0.01259	0.023606
31	0.003126	0.003908	0.007816
32	0.001557	0.002335	0.007785
33	0	0.002335	0.008563
34	0.002334	0.005446	0.027229
35	0.001554	0.003885	0.009324
36	0.003096	0.003096	0.010062
37	0.018557	0.023196	0.064949
38	0.004638	0.005411	0.011594
39	0.001545	0.006953	0.012361
40	0	0.002302	0.007673
41	0.003058	0.008408	0.029047
42	0.000763	0.00229	0.018323
43	0.024308	0.032664	0.076723
44	0.000757	0.003783	0.01135
45	0.005985	0.005237	0.017208
46	0.000748	0	0.008228
47	0.000748	0.003738	0.016449
48	0	0.002988	0.011953
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2	0.001489	0.012655	0.023077
3	0.005949	0.005949	0.012642
4	0.005198	0.005941	0.011882
5	0.009561	0.025006	0.06178
6	0.006606	0.005138	0.014679
7	0.006603	0.016142	0.044757
8	0.000733	0.000733	0.010995
9	0.008768	0.014613	0.027764
10	0.026969	0.017493	0.03936
11	0.001456	0.001456	0.004367
12	0.004354	0.010158	0.021768
13	0	0.00145	0.004351
14	0.002157	0.002157	0.01438
15	0.010063	0.012938	0.025875
16	0.010054	0.010772	0.022263
17	0.002868	0.007171	0.011474
18	0.007171	0.017927	0.049478
19	0.007858	0.011429	0.029287
20	0.004266	0.012086	0.019907
21	0.011375	0.04479	0.063274
22	0.003554	0.004264	0.015636
23	0.002122	0.006365	0.010609
24	0.014096	0.020439	0.047927
25	0.006342	0.006342	0.015502
26	0	0.001408	0.004225
27	0.005602	0.006303	0.018908
28	0.009784	0.021664	0.058003
29	0.011109	0.012498	0.055546
30	0	0.001381	0.008284
31	0.003448	0.012414	0.030345
32	0.00618	0.008926	0.014419
33	0.002049	0.002732	0.00888
34	0.009559	0.009559	0.010242
35	0.001363	0.002045	0.009541
36	0	0.000675	0.002698
37	0	0.002017	0.002017
38	0.000672	0.003359	0.022172
39	0.022081	0.026765	0.064905
40	0.003326	0.01264	0.031268
41	0.00266	0.013298	0.019947
42	0.001323	0.003968	0.005952
43	0.002645	0.009257	0.013224
44	0.009889	0.015822	0.032962
45	0.007229	0.017086	0.035486
46	0.002626	0.005253	0.011162
47	0	0.003934	0.005245
48	0.009802	0.018951	0.049664
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2	0.004561	0.012379	0.033227
3	0.0013	0.0026	0.014299
4	0.010399	0.013649	0.023399
5	0.005189	0.007783	0.024646
6	0.002594	0.003243	0.006486
7	0.007132	0.009078	0.022694
8	0.009716	0.005182	0.01425
9	0.009059	0.015529	0.042706
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11	0	0.001938	0.005169
12	0.003218	0.000644	0.006437
13	0.000643	0.00193	0.005147
14	0.003209	0.005135	0.017972
15	0.003845	0.018584	0.014739
16	0.004481	0.009603	0.023046
17	0.004477	0.014072	0.030703
18	0.003836	0.005114	0.003197
19	0	0	0.007032
20	0	0.002557	0.010867
21	0.003835	0.005753	0.031962
22	0.001277	0.010216	0.019793
23	0.003186	0.005735	0.007647
24	0.001911	0.007006	0.012738
25	0.000635	0.008251	0.026657
26	0.005709	0.005074	0.009514
27	0.01331	0.015211	0.039929
28	0.005065	0.011396	0.020892
29	0.017691	0.036014	0.058127
30	0.001895	0.001895	0.005686
31	0.009461	0.015769	0.040369
32	0.007555	0.01637	0.042185
33	0	0.002517	0.008811
34	0.000629	0.006287	0.015716
35	0.003769	0.003769	0.006911
36	0.000628	0.00314	0.005651
37	0.000627	0.003764	0.021955
38	0.003756	0.011894	0.017528
39	0.00375	0.005625	0.009999
40	0.001875	0.003124	0.004374
41	0.000624	0.002498	0.00562
42	0.000621	0.004966	0.019865
43	0.004345	0.006828	0.009312
44	0.003091	0.011128	0.023491
45	0.003703	0.007406	0.015428
46	0.000616	0.00678	0.023422
47	0.000614	0	0.006751
48	0.000613	0.00184	0.009812
49	0.01407	0.01407	0.044047
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2	0.003669	0.009173	0.015289
3	0.003669	0.014676	0.0532
4	0.004275	0.007328	0.023817
5	0.014634	0.026829	0.05183
6	0.003038	0.001215	0.008507
7	0.002428	0.003641	0.006676
8	0.00602	0.014448	0.021672
9	0.005412	0.011424	0.018039
10	0.00901	0.011412	0.033035
11	0.002996	0.001798	0.00839
12	0.004184	0.004781	0.00777
13	0.002984	0.005371	0.019095
14	0.004769	0.016095	0.010134
15	0.005952	0.022618	0.049997
16	0.002371	0.007707	0.010671
17	0.00296	0.004736	0.010064
18	0.008287	0.010655	0.027229
19	0.008276	0.007094	0.027783
20	0.008838	0.013552	0.015909
21	0.001764	0.007643	0.005879
22	0.003522	0.008217	0.009978
23	0.002347	0.003521	0.009976
24	0.002344	0.008789	0.022851
25	0.002339	0.007017	0.018127
26	0.008759	0.016935	0.027446
27	0.007571	0.013978	0.017472
28	0.002327	0.008727	0.005818
29	0.003482	0.019153	0.034244
30	0.003482	0.004643	0.011608
31	0.00116	0.00696	0.034222
32	0.002896	0.005213	0.015639
33	0.002304	0.002304	0.008065
34	0.004593	0.005741	0.007463
35	0.002859	0.005145	0.022869
36	0.00057	0.001711	0.013685
37	0.007977	0.00057	0.005698
38	0.003983	0.00569	0.018778
39	0.000568	0.003411	0.006822
40	0.018748	0.024429	0.057947
41	0.003972	0.00454	0.017592
42	0.001134	0	0.00567
43	0.002827	0.008481	0.010177
44	0	0.001128	0.009025
45	0.003366	0.006733	0.003366
46	0.006129	0.007243	0.014486
47	0.002784	0.005569	0.005569
48	0	0	0.000556
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2	0.000555	0.003327	0.007764
3	0.003868	0.007183	0.012709
4	0.003862	0.006069	0.00938
5	0.002203	0.006059	0.022033
6			
7	0.003304	0.01707	0.047906
8	0.002747	0.012086	0.010438
9	0.001647	0.00549	0.007686
10	0.001646	0.002744	0.011523
11	0.003287	0.012599	0.041085
12			
13	0.007609	0.015218	0.031522
14	0	0.006521	0.013042
15	0.001085	0.004339	0.005424
16	0.001622	0.003784	0.016216
17	0.004864	0.004864	0.010809
18			
19	0	0	0.00162
20	0.002692	0.008613	0.019918
21	0.001614	0.001614	0.009682
22	0.002676	0.006422	0.026223
23			
24	0.015412	0.011692	0.045705
25	0.001594	0.007438	0.020719
26	0.000531	0.003717	0.006372
27	0.001062	0.001062	0.004777
28			
29	0	0.00265	0.00636
30	0.002119	0.007416	0.011124
31	0.003695	0.004223	0.011612
32	0.0021	0.008925	0.009975
33	0.01151	0.012033	0.024066
34	0.007844	0.010981	0.035558
35			
36	0.004705	0.024569	0.029796
37	0.001045	0.003134	0.015146
38	0.00522	0.006264	0.00783
39	0.001039	0	0.00052
40	0.000518	0.001554	0.0057
41	0.002588	0.009318	0.016566
42	0.000518	0.001035	0.007763
43			
44	0.00207	0.007761	0.021732
45	0.016025	0.021712	0.056864
46	0.004133	0.009298	0.022729
47	0.003095	0.001548	0.017024
48	0.006704	0.013923	0.014955
49	0.005154	0.005669	0.005669
50	0.000515	0.004121	0.024211
51			
52	0.00872	0.010772	0.0277
53	0.002051	0.009744	0.038461
54	0.002048	0.00768	0.015873
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56	0.00256	0.00512	0.017409
57	0.003565	0.004074	0.008149
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2	0.001527	0.008146	0.032585
3	0	0.006612	0.004578
4	0.003551	0.003044	0.004566
5	0.001014	0.003042	0.002028
6	0.002529	0.004046	0.013656
7	0.002528	0.005562	0.006573
8	0.003032	0.007581	0.02729
9	0.00101	0.00101	0.006059
10	0.000505	0.008077	0.006058
11	0.000502	0.002508	0.004514
12	0.008526	0.01003	0.017553
13	0.001003	0.008023	0.026577
14	0.003	0.012002	0.010502
15	0.005991	0.014978	0.012981
16	0.002994	0.002495	0.00549
17	0	0	0.014438
18	0.001986	0.005958	0.010426
19	0.000496	0.000993	0.005957
20	0.00943	0.013897	0.02978
21	0.003962	0.008914	0.016342
22	0.000495	0.001485	0.00396
23	0.004455	0.002475	0.005445
24	0.001484	0.005441	0.015828
25	0.001972	0.004929	0.021689
26	0.002954	0.006893	0.013293
27	0.013283	0.011315	0.046737
28	0.00295	0.0177	0.034417
29	0.003437	0.010312	0.015222
30	0.002945	0.009816	0.009816
31	0.001471	0.004412	0.010296
32	0.000978	0.003423	0.021517
33	0.006344	0.007808	0.00976
34	0.001464	0.002928	0.011711
35	0.003411	0.001949	0.000974
36	0.001947	0.00292	0.010219
37	0.006802	0.006316	0.014575
38	0.001456	0.001941	0.003883
39	0.001455	0.006304	0.024248
40	0.000485	0.003394	0.011152
41	0.001934	0.000967	0.006285
42	0.00193	0.000965	0.003859
43	0.001442	0.007691	0.018267
44	0.002403	0.000961	0.007209
45	0.005275	0.006714	0.012948
46	0.003357	0.005275	0.010549
47	0.004311	0.001916	0.023953
48	0.005263	0.008612	0.014353
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2	0.002389	0.000956	0.007167
3	0.002386	0.008111	0.014791
4	0.003333	0.007141	0.008093
5	0.002379	0.015698	0.01998
6	0	0.00095	0.004752
7	0.007111	0.001422	0.008059
8	0	0.002834	0.00992
9	0.003305	0.008026	0.015579
10	0.000943	0.001415	0.006602
11	0.000939	0.002817	0.007982
12	0.002341	0.006086	0.01264
13	0.003744	0.009829	0.040251
14	0.007016	0.014968	0.037421
15	0.008415	0.005143	0.01683
16	0.000467	0.003735	0.009805
17	0.001867	0.002334	0.006068
18	0.006526	0.004661	0.01445
19	0	0.004658	0.007453
20	0.001861	0.004187	0.015352
21	0	0.000929	0.002323
22	0.001853	0.003243	0.01251
23	0.003235	0.001849	0.010631
24	0.002309	0.006004	0.012007
25	0.002309	0.005541	0.025399
26	0.009219	0.008758	0.025812
27	0.004148	0.006913	0.010599
28	0.002762	0.005984	0.021174
29	0.000919	0.001839	0.006896
30	0.002295	0.006886	0.016068
31	0.00459	0.026623	0.059213
32	0.001833	0.005958	0.008707
33	0	0.001833	0.009165
34	0	0.005038	0.012365
35	0.001372	0.004116	0.013719
36	0.011425	0.006398	0.01371
37	0	0.000911	0.000911
38	0	0.001365	0.003184
39	0.000454	0.000454	0.003178
40	0.004085	0.00817	0.010893
41	0.00272	0.005441	0.003627
42	0.005435	0.006341	0.010417
43	0.003618	0.00407	0.009045
44	0.002258	0.009936	0.012646
45	0.001805	0.005415	0.01489
46	0.006301	0.026552	0.031503
47	0.000899	0.002696	0.002696
48	0.013921	0.012574	0.023351
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2	0.002689	0.008068	0.026893
3	0.001793	0.005826	0.017478
4	0.011649	0.012545	0.026882
5	0.000448	0.000448	0.003135
6	0.005374	0.005822	0.007166
7	0.000447	0.004915	0.005809
9	0.001339	0.005357	0.003571
10	0.000892	0.000892	0.001338
11	0.007582	0.012488	0.026313
12			
13	0.004	0.003555	0.011999
14	0.00311	0.005775	0.018659
15	0	0.000888	0.006213
16	0.001774	0.002217	0.006651
17	0.00399	0.006207	0.01064
18			
19	0.008416	0.011517	0.031451
20	0.000443	0.002658	0.007973
21	0.006185	0.010603	0.031366
22	0.001767	0.00795	0.011041
23			
24	0.003085	0.009697	0.022039
25	0.001758	0.007471	0.025488
26	0.003074	0.003074	0.013173
27	0.005685	0.005248	0.01618
28	0.001749	0.011369	0.01924
29			
30	0.005245	0.011801	0.014861
31	0.002183	0.006549	0.01659
32	0.003929	0.011351	0.03056
33	0.002182	0.001746	0.006983
34	0.018758	0.022248	0.040134
35			
36	0.00218	0.003924	0.004796
37	0.000435	0.003047	0.010881
38	0	0.003482	0.013492
39	0.003045	0.006091	0.011746
40	0.001739	0.006956	0.011303
41			
42	0.010431	0.015646	0.023904
43	0.001736	0.004339	0.006943
44	0.000867	0.009541	0.012144
45	0.003025	0.005619	0.005186
46	0.003888	0.012528	0.014688
47			
48	0.003023	0.003887	0.00475
49	0.002591	0.004318	0.00475
50	0	0.015918	0.01936
51	0.00086	0.004732	0.006023
52	0.00172	0.002151	0.003011
53			
54	0.006016	0.007306	0.011173
55	0.005998	0.005569	0.014994
56	0.00214	0.003424	0.006421
57	0.003852	0.007276	0.019261
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2	0.007253	0.010239	0.019625
3	0.000853	0.009383	0.028575
4	0.000852	0.005538	0.013631
5	0	0.004681	0.023831
6			
7	0.000425	0.002547	0.011462
8	0.000423	0.00381	0.013123
9	0.005488	0.012242	0.018151
10	0.003366	0.005049	0.00589
11	0.001681	0.001681	0.003361
12			
13	0.002099	0.002939	0.008816
14	0.004197	0.008814	0.025183
15	0.004608	0.008797	0.013823
16	0.002512	0.009211	0.019259
17	0.005022	0.007114	0.027619
18			
19	0.00376	0.005013	0.012951
20	0.000416	0.001247	0.009973
21	0.004563	0.005808	0.017423
22	0.004148	0.004978	0.007882
23			
24	0	0.001659	0.000829
25	0.004146	0.00995	0.023632
26	0	0.006632	0.012435
27	0	0.007026	0.006199
28	0.004128	0.002889	0.003715
29			
30	0.001238	0.003714	0.00949
31	0.004534	0.004534	0.008656
32	0	0.000411	0.001646
33	0.000822	0.004109	0.015613
34	0.003286	0.010267	0.019713
35			
36	0.002871	0.005332	0.004922
37	0.00082	0.00246	0.010251
38	0.00123	0.00369	0.0082
39	0.00041	0.001229	0.001639
40	0.002458	0.004507	0.007785
41			
42	0.002867	0.004915	0.01024
43	0.001227	0.005319	0.006137
44	0.002045	0.004091	0.008181
45	0.000816	0.007347	0.005714
46	0.006521	0.017526	0.031384
47			
48	0.002035	0.001628	0.003256
49	0	0.000811	0.00568
50	0.000405	0.00162	0.003646
51	0.00323	0.000808	0.010902
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53	0.003624	0.006442	0.010871
54	0.001609	0.001207	0.006437
55	0.002413	0.010861	0.015687
56	0.003611	0.003209	0.013239
57	0	0.000401	0.004813
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2	0.001203	0.003208	0.008021
3	0.008008	0.022023	0.040842
4	0.0044	0.004	0.006399
5	0.000399	0.001996	0.005988
6	0.005189	0.010777	0.021154
7	0.005185	0.006781	0.026326
8	0.002787	0.005573	0.015128
9	0.000796	0.003582	0.01194
10	0.00199	0.007561	0.013929
11	0.001989	0.007558	0.015117
12	0.007929	0.009911	0.014669
13	0.000793	0.001982	0.003171
14	0.003162	0.004347	0.006719
15	0.006717	0.004741	0.018966
16	0.001185	0.002765	0.009874
17	0.002764	0.002764	0.009476
18	0.000787	0.003148	0.007082
19	0.001966	0.002752	0.006291
20	0.00313	0.002739	0.001174
21	0.001956	0.005867	0.020731
22	0.001955	0.003128	0.008603
23	0.001168	0.007399	0.021808
24	0.001558	0.001558	0.008957
25	0.005827	0.010101	0.025252
26	0.00233	0.003884	0.008156
27	0.001162	0.001162	0.003098
28	0.000774	0.00271	0.008903
29	0.009279	0.011599	0.021652
30	0.003479	0.008119	0.01817
31	0.001545	0.004634	0.008882
32	0.000386	0.003088	0.005405
33	0	0.000386	0.001543
34	0.0027	0.0081	0.011572
35	0.00655	0.007321	0.027742
36	0.00154	0.001925	0.00308
37	0.002689	0.005763	0.008836
38	0.001537	0.001921	0.006146
39	0.001152	0.004224	0.007296
40	0.00537	0.004986	0.016492
41	0.008048	0.007282	0.019545
42	0.003061	0.00574	0.017602
43	0	0.000765	0.003826
44	0.000764	0.00344	0.011848
45	0.004192	0.002668	0.008765
46	0	0	0.000381
47	0.001898	0.004176	0.006074
48	0.007202	0.008339	0.018573
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2	0.004545	0.00606	0.012879
3	0.001514	0.003029	0.009086
4	0.002271	0.00757	0.012491
5	0.002271	0.000378	0.005298
6	0.003395	0.004527	0.012449
7	0.001886	0.003395	0.012447
8	0.005274	0.007535	0.019967
9	0.004137	0.004513	0.006018
10	0.002631	0.004134	0.00902
11	0	0.000376	0.002629
12	0.004494	0.002622	0.014232
13	0.001497	0.004865	0.009355
14	0.002619	0.002619	0.007857
15	0.001496	0.004863	0.013092
16	0.003363	0.009342	0.010089
17	0.001492	0.00373	0.002611
18	0.000373	0.000745	0.006333
19	0.001486	0.002971	0.010028
20	0.001112	0.00482	0.006304
21	0	0.001482	0.005188
22	0.003334	0.00852	0.015187
23	0.00148	0.00259	0.007399
24	0.001109	0.000739	0.005174
25	0.000739	0.005539	0.008124
26	0.001107	0.006642	0.017342
27	0	0.001106	0.004422
28	0.002211	0.004791	0.009581
29	0.001474	0.004052	0.009578
30	0.01028	0.016155	0.027537
31	0.002936	0.004037	0.013212
32	0	0.001467	0.010272
33	0.002568	0.006236	0.007704
34	0.000734	0.000734	0.004768
35	0.004394	0.012815	0.019771
36	0.002929	0.005125	0.010982
37	0	0.002549	0.002914
38	0	0.004005	0.013473
39	0.000728	0.005097	0.011651
40	0	0.001456	0.010918
41	0.001092	0.004367	0.003639
42	0.001818	0.003272	0.006181
43	0.011956	0.007971	0.0221
44	0.001811	0.005069	0.006156
45	0.001086	0.002172	0.006877
46	0.002533	0.003619	0.003981
47	0.00144	0.006838	0.016195
48	0.00036	0.001438	0.003595
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2	0.002512	0.002512	0.00323
3	0.004301	0.007527	0.008602
4	0.003582	0.008238	0.008596
5	0.001432	0.001791	0.003581
6	0.001073	0.002504	0.007154
7	0.000715	0.003934	0.00608
8	0.002857	0.011071	0.014999
9	0.003213	0.006782	0.012137
10	0.000711	0.005336	0.00996
11	0.001066	0.003908	0.006395
12	0.000355	0.004614	0.004969
13	0.002838	0.004967	0.006387
14	0.006739	0.008513	0.021281
15	0.002482	0.008155	0.015602
16	0.002836	0.004254	0.007089
17	0	0	0.002126
18	0	0.001063	0.006023
19	0.00744	0.00248	0.002834
20	0.017342	0.029374	0.062642
21	0.001062	0.002831	0.003893
22	0.009909	0.021587	0.035034
23	0.007428	0.006013	0.01238
24	0.001413	0.003886	0.009185
25	0.00247	0.001765	0.00247
26	0.000705	0.003526	0.00529
27	0.00141	0.002115	0.007049
28	0.004569	0.004569	0.013004
29	0.000703	0.003162	0.005621
30	0.002106	0.005266	0.014043
31	0.001403	0.002806	0.003157
32	0.003153	0.002452	0.005254
33	0.001401	0.004552	0.004552
34	0.0007	0.0007	0.005252
35	0.001398	0.004894	0.009439
36	0.003146	0.005594	0.018179
37	0.003134	0.010447	0.028554
38	0.002435	0.005218	0.013568
39	0.001389	0.007294	0.007642
40	0.001042	0.001389	0.004167
41	0.001389	0.005556	0.010417
42	0.000347	0.00243	0.004513
43	0.005207	0.007636	0.012496
44	0.002426	0.004853	0.007279
45	0.004501	0.009347	0.020079
46	0.002419	0.005183	0.010712
47	0.00172	0.002064	0.011006
48	0.001717	0.00515	0.013047
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2	0.001373	0.002745	0.000686
3	0.003087	0.002401	0.005831
4	0.000686	0.000686	0.002058
5	0.000343	0.000343	0.001371
6	0.000343	0.001028	0.004112
7	0.000684	0.000684	0.00513
8	0.003078	0.006498	0.011286
9	0.004102	0.005811	0.007862
10	0.000683	0.002391	0.006491
11	0	0.003756	0.011267
12	0.000341	0.007165	0.010235
13	0.010564	0.020787	0.038166
14	0.002384	0.01362	0.025538
15	0.004422	0.006464	0.008164
16	0.001695	0.004068	0.010849
17	0.003728	0.009152	0.008474
18	0.001683	0.008751	0.016155
19	0.002018	0.0037	0.004709
20	0.003026	0.005715	0.013447
21	0.000336	0.002351	0.008396
22	0.001342	0.00302	0.007382
23	0.002347	0.003353	0.007712
24	0	0	0.005028
25	0.004006	0.005007	0.011684
26	0.003334	0.006002	0.014004
27	0	0.00133	0.008978
28	0.002323	0.012611	0.019912
29	0.002984	0.004974	0.006301
30	0.006293	0.006293	0.014574
31	0.000331	0.000662	0.000993
32	0.00298	0.007284	0.019533
33	0.001655	0.001986	0.004303
34	0.001655	0.001655	0.005958
35	0.000662	0.004634	0.008606
36	0.000331	0.00397	0.006617
37	0.002977	0.005623	0.025467
38	0.001321	0.002643	0.012552
39	0.001321	0	0.004952
40	0.00066	0.003629	0.004949
41	0.006264	0.013846	0.026043
42	0.000657	0.002958	0.007888
43	0.001969	0.002298	0.006236
44	0.000654	0.002943	0.014714
45	0.000327	0.004577	0.008828
46	0.001962	0.007846	0.019942
47	0.000326	0.001306	0.010446
48	0.001305	0.000326	0.002284
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2	0.002282	0.003912	0.016627
3	0.000651	0.001303	0.008142
4	0.013014	0.022774	0.037414
5	0.001948	0.003246	0.00422
6	0.001298	0	0.000974
7	0.000649	0.002594	0.007135
8	0.003888	0.008101	0.018794
9	0.004535	0.003887	0.011014
10	0.004533	0.006151	0.022016
11	0.000647	0.001942	0.009063
12	0.008087	0.008087	0.027173
13	0	0	0
14	0.0042	0.004523	0.015832
15	0	0.001937	0.002583
16	0.007098	0.010001	0.010969
17	0.004833	0.005155	0.01031
18	0.002894	0.005789	0.010613
19	0.001605	0.00321	0.007703
20	0.002883	0.003843	0.008648
21	0.004479	0.00192	0.007359
22	0.006388	0.003194	0.009902
23	0.001596	0.002235	0.006385
24	0.00956	0.014659	0.031229
25	0.00223	0.003504	0.0086
26	0.002547	0.005413	0.007005
27	0.001592	0.003502	0.007641
28	0.002546	0.002864	0.011457
29	0.004131	0.005085	0.008898
30	0.00666	0.003806	0.008563
31	0.004751	0.013935	0.02122
32	0.000317	0.000633	0.002532
33	0.002216	0.002849	0.006964
34	0.001582	0.001582	0.007595
35	0.001897	0.004427	0.009169
36	0.000316	0.000948	0.00158
37	0.003773	0.011004	0.016349
38	0	0	0.00314
39	0.002511	0.010358	0.020402
40	0.002196	0.004392	0.006275
41	0.002196	0.002196	0.003137
42	0.001568	0.005017	0.020694
43	0.002194	0.005014	0.020055
44	0.000624	0.002809	0.008426
45	0.002493	0.004051	0.006232
46	0.001557	0.003426	0.008097
47	0.004359	0.007162	0.015257
48	0.000623	0.004358	0.02148
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2	0	0.002801	0.006535
3	0.000622	0.002798	0.00995
4	0.000933	0.001244	0.005596
5	0.00186	0.00248	0.010542
6	0.00155	0.00093	0.00217
7	0.002479	0.004958	0.007746
8	0.001857	0.010835	0.010526
9	0.002786	0.000929	0.001238
10	0.000928	0.005261	0.013308
11	0.001547	0.001857	0.003094
12	0.002165	0.002783	0.004948
13	0	0.002164	0.0068
14	0.001545	0.001545	0.002472
15	0.001236	0.002162	0.005252
16	0.000309	0.002471	0.007105
17	0.000309	0.001234	0.001234
18	0.001851	0.001543	0.015428
19	0.005551	0.005242	0.015418
20	0.00185	0.003392	0.0074
21	0.002466	0.010791	0.016032
22	0.002158	0.008939	0.026816
23	0.001847	0.001847	0.004002
24	0.003072	0.0043	0.006143
25	0.001837	0.003061	0.01347
26	0.003366	0.005508	0.013159
27	0.000305	0.000305	0.002443
28	0.001525	0.004269	0.011586
29	0.000915	0.01006	0.011889
30	0.000914	0.007918	0.0067
31	0.002739	0.004261	0.006696
32	0.002434	0.003651	0.00791
33	0.000913	0.001825	0.007301
34	0.001521	0.002433	0.005475
35	0.003951	0.007295	0.016718
36	0.003343	0.002735	0.004559
37	0.002733	0.006681	0.022472
38	0.002733	0.004555	0.005465
39	0.000908	0.001514	0.004239
40	0	0	0.001513
41	0.003328	0.008773	0.006353
42	0.00272	0.008161	0.012091
43	0.000302	0.002416	0.001812
44	0.006334	0.015684	0.02805
45	0.004821	0.006026	0.012353
46	0.003906	0.003005	0.007211
47	0.0003	0.004206	0.007511
48	0.000601	0.002703	0.009611
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2 0 0.001801 0.007806
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17 0.001487 0.000892 0.004758
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23 0.005638 0.003264 0.006232
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33 0 0.002063 0.006778
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37 0 0.001467 0.004989
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43 0.004374 0.002624 0.003208
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48 0.00029 0.002321 0.003481
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2	0.00058	0.002318	0.002028
3	0.002314	0.004339	0.004339
4	0.001157	0.001446	0.006651
5	0.002024	0.006072	0.009831
6	0.005492	0.006359	0.009539
7	0.000578	0.002599	0.005487
8			
9	0.00202	0.005194	0.011254
10	0.002019	0.003173	0.00577
11	0.002019	0.008077	0.015001
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13	0.001731	0.001442	0.003173
14	0.001442	0.002306	0.00346
15	0.001729	0.01153	0.016142
16	0.002302	0.002014	0.005754
17	0.000287	0.000862	0.003449
18	0.002006	0.003726	0.006879
20	0.000286	0.000859	0.003721
21	0.004002	0.005717	0.009433
22	0	0.000857	0.002572
23	0.000286	0.001428	0.002284
24	0.001427	0.003711	0.006851
26	0.00542	0.00599	0.010554
27	0.001422	0.003698	0.013937
28	0.000568	0.001704	0.00284
29	0.001135	0.004822	0.007375
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31	0	0.001701	0.00964
32	0.001133	0.00255	0.002833
33	0.001983	0.0017	0.004815
34	0.002265	0.004813	0.005663
35	0.001979	0.00311	0.006503
36	0.000565	0.003109	0.008198
38	0.005088	0.005936	0.009328
39	0.000847	0.00367	0.003105
40	0.00367	0.003952	0.012703
41	0.000564	0.005077	0.008179
43	0.001691	0.001409	0.005072
44	0.004226	0.005916	0.007606
45	0.002535	0.007886	0.020561
46	0.004506	0.010702	0.015208
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48	0.00169	0.007321	0.016051
49	0	0.000843	0.003372
50	0.000281	0.000843	0.004495
51	0.001683	0.003367	0.007856
52	0.002243	0.010376	0.028603
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54	0.001402	0.003926	0.005888
55	0	0.0014	0.008402
56	0	0.00112	0.004201
57	0.008118	0.008118	0.020436
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2	0.001679	0.001959	0.002799
3	0.001394	0.002231	0.00725
4	0.002786	0.008079	0.014765
5	0.00556	0.004726	0.007506
6	0.000834	0.001112	0.004726
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8	0.000555	0	0
9	0.00222	0.004718	0.00888
10	0.001387	0.003329	0.005826
11	0.000832	0.000832	0.002219
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13	0.002772	0.002495	0.010534
14	0.000277	0.001663	0.010533
15	0.001663	0.001386	0.004157
16	0.002215	0.002492	0.00443
17	0.000277	0.000554	0.001107
18	0.000276	0.001659	0.006082
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21	0.000552	0.001104	0.002208
22	0.000276	0.000276	0.00193
23	0.000826	0.001377	0.004682
24			
25	0.000551	0.002203	0.004682
26	0.001101	0.001101	0.004127
27	0.001375	0.001925	0.003025
28	0.001096	0.002467	0.004934
29			
30	0.000273	0.002182	0.006001
31	0	0.001635	0.002181
32	0.000272	0	0.00109
33	0.003259	0.003259	0.005703
34	0.002444	0.004345	0.008419
35			
36	0.000543	0.002443	0.001357
37	0	0.000814	0.002442
38	0.000271	0.003793	0.004877
39	0.000811	0.002162	0.004325
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41	0.003243	0.008649	0.012703
42	0.001349	0.003778	0.007016
43	0.004854	0.00782	0.016449
44	0.001346	0.003501	0.006463
45	0.002689	0.004571	0.007797
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47	0.00188	0.011283	0.015849
48	0.001342	0.004027	0.008053
49	0	0.000268	0.005355
50	0.001606	0.004549	0.010168
51	0.000535	0.001605	0.003477
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53	0.000801	0.001869	0.006941
54	0.0016	0.009865	0.015464
55	0.002933	0.006665	0.01493
56	0.003466	0.002666	0.007198
57	0.000533	0.0008	0.005064
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2	0.000533	0.002399	0.002399
3	0.001064	0.006386	0.008249
4	0.001862	0.001862	0.007182
5	0.00186	0.002924	0.015947
6	0.002123	0.002654	0.007961
7	0.001327	0.001857	0.003715
8	0.001326	0.001857	0.00504
9	0.000265	0.00106	0.001325
10	0.001323	0.002647	0.00794
11	0.001058	0.002381	0.008996
12	0.001852	0.005556	0.005556
13	0.004232	0.002645	0.009786
14	0.002116	0.002909	0.004496
15	0.000264	0.002113	0.003698
16	0.001321	0.001321	0.001849
17	0.003697	0.002905	0.006866
18	0.00132	0.002903	0.005807
19	0.001318	0.002373	0.001582
20	0.00079	0.002371	0.002371
21	0.00999	0.026553	0.035755
22	0.001314	0.000788	0.001051
23	0.00499	0.008929	0.018646
24	0.0021	0.003675	0.008138
25	0.001574	0.007607	0.009444
26	0.001573	0.004719	0.007865
27	0.000786	0.001573	0.003408
28	0.001048	0.001048	0.003668
29	0.001832	0.003927	0.007068
30	0.001046	0.007319	0.01124
31	0.001045	0.00209	0.00418
32	0.000521	0.003128	0.005214
33	0.002606	0.001824	0.006776
34	0.002083	0.001562	0.002604
35	0	0.001816	0.001038
36	0.002592	0.004666	0.010886
37	0.004135	0.015506	0.027653
38	0.002063	0.001547	0.003868
39	0.002063	0.003868	0.009282
40	0.004897	0.004124	0.010826
41	0.000258	0.001288	0.004894
42	0.00103	0.007982	0.005665
43	0.001287	0.002574	0.003604
44	0.003337	0.00385	0.010524
45	0	0	0.000769
46	0.004098	0.009989	0.021002
47	0.002047	0.00307	0.002303
48	0.000767	0.003068	0.004858
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2	0.001275	0.003316	0.006631
3	0.002805	0.003315	0.003825
4	0.00051	0.002038	0.003821
5	0.001783	0.001783	0.004584
6	0.004582	0.001527	0.005346
7	0.000764	0.002291	0.004073
8	0.004071	0.002545	0.00916
9	0.000508	0.002792	0.007106
10	0.002537	0.003298	0.009893
11	0.000761	0.002283	0.007102
12	0.002283	0.003043	0.005579
13	0	0.000506	0.004305
14	0.003038	0.002785	0.01038
15	0.000506	0.001265	0.007086
16	0	0.004049	0.001771
17	0.000253	0.001769	0.00278
18	0.001763	0.000504	0.003275
19	0.001259	0.003777	0.005539
20	0.001005	0.002513	0.003519
21	0.000751	0.003503	0.004004
22	0.001	0.003248	0.008496
23	0.000749	0.002246	0.005241
24	0.000249	0.002994	0.005988
25	0.001247	0.002244	0.005237
26	0.000249	0.001745	0.002243
27	0.000747	0.000996	0.00274
28	0.003977	0.004723	0.005717
29	0.002229	0.006688	0.010156
30	0.002471	0.002471	0.004449
31	0	0.000741	0.004201
32	0.002224	0.000741	0.004942
33	0.00074	0.002466	0.003206
34	0.001232	0.000246	0.00345
35	0.000492	0.003447	0.006894
36	0.004186	0.00714	0.012064
37	0.005659	0.004429	0.013041
38	0.003687	0.006391	0.017453
39	0.001228	0.002948	0.004913
40	0.000982	0.008597	0.018176
41	0.000982	0.000491	0.003192
42	0.002456	0.006385	0.008595
43	0.001227	0.001473	0.000491
44	0.000981	0.002453	0.005152
45	0.000978	0.002934	0.007091
46	0.000976	0.002197	0.003906
47	0.001708	0.003173	0.004637
48	0.001218	0.001462	0.005116
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2	0.000731	0.001705	0.003897
3	0.002192	0.003896	0.00487
4	0.000487	0.000243	0.003165
5	0.00219	0.001704	0.002434
6	0.000243	0.003403	0.006077
7	0.000243	0.000971	0.004614
8	0.004604	0.01139	0.007513
9	0.001933	0.002417	0.004592
10	0.001208	0.001932	0.003623
11	0.002172	0.002413	0.003861
12	0.000724	0.000241	0.001206
13	0.000965	0.000723	0.003135
14	0.000722	0.003853	0.009632
15	0.001201	0.000961	0.002163
16	0.00096	0.002161	0.006963
17	0.001919	0.004797	0.002878
18	0.003836	0.005035	0.015345
19	0.001435	0.005022	0.006936
20	0.000717	0.000239	0.004301
21	0.00215	0.006212	0.009318
22	0.004061	0.0043	0.010033
23	0.001193	0.003579	0.007874
24	0.001192	0.001192	0.005484
25	0.000953	0.00429	0.007627
26	0.000952	0.004045	0.006186
27	0.000951	0.000714	0.004757
28	0.001426	0.002377	0.005943
29	0.000713	0.004516	0.00618
30	0.000713	0.004751	0.006414
31	0.001186	0.001186	0.004982
32	0.000474	0.00166	0.006404
33	0.000946	0.003549	0.011119
34	0.000709	0.001891	0.004019
35	0.000472	0.000709	0.001653
36	0.003773	0.004009	0.010377
37	0.000941	0.003293	0.006115
38	0.003993	0.003758	0.016912
39	0.000235	0.001644	0.00728
40	0.002346	0.004223	0.005161
41	0.000469	0.001876	0.000469
42	0.002343	0.003749	0.004921
43	0.001171	0.000703	0.002343
44	0.002577	0.002577	0.007497
45	0.002342	0.002342	0.008433
46	0	0.000702	0.004445
47	0.002105	0.002339	0.005848
48	0.003971	0.00584	0.005606
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2	0.002098	0.002798	0.007461
3	0	0.000233	0.001632
4	0.002097	0.003496	0.006991
5	0.000699	0.002562	0.002329
6	0.000466	0.000931	0.002096
7	0.003956	0.003258	0.007446
8	0.004885	0.010002	0.027679
9	0.000697	0.002091	0.001626
10	0.001392	0.004409	0.004873
11	0.001389	0.000926	0.003704
12	0.001157	0.000694	0.001389
13	0.001851	0.005553	0.011568
14	0.000924	0.001618	0.005315
15	0.002078	0.003464	0.009699
16	0.000924	0.001847	0.004157
17	0.000923	0.004616	0.012464
18	0.000461	0.000461	0.001153
19	0	0.000461	0.002075
20	0.001613	0.006221	0.010598
21	0.007142	0.011058	0.022116
22	0.000459	0.001147	0.003671
23	0.000687	0.003895	0.009165
24	0.00229	0.003664	0.006413
25	0.002518	0.002518	0.012132
26	0.000916	0.005951	0.00412
27	0.000915	0.000686	0.002745
28	0.001371	0.007538	0.01439
29	0.000456	0.003195	0.010042
30	0	0.000684	0.001369
31	0.000228	0.00114	0.003875
32	0.003872	0.003645	0.010022
33	0.000455	0.002275	0.006599
34	0.001365	0.001365	0.007964
35	0.002046	0.004093	0.015234
36	0.000682	0.000227	0.00159
37	0.001135	0.000681	0.00227
38	0.000681	0.002269	0.004311
39	0.001815	0.002269	0.003857
40	0.004076	0.003623	0.011775
41	0.002037	0.0043	0.010863
42	0	0.000452	0.003844
43	0.001581	0.000903	0.003162
44	0.000226	0.001805	0.004964
45	0.001577	0.004732	0.015775
46	0.002477	0.005404	0.009457
47	0.002023	0.005844	0.005619
48	0.000448	0.001793	0.003585
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2	0	0.000896	0.002689
3	0.002017	0.006946	0.005377
4	0.003582	0.00582	0.01746
5	0.00179	0.004922	0.011858
6	0.001342	0.002013	0.003132
7	0.001342	0.003354	0.002907
8	0.000224	0.000894	0.00246
9	0.000223	0.00134	0.00067
10	0.002454	0.001339	0.006024
11	0.000668	0.008685	0.004454
12	0.00089	0.003338	0.008456
13	0.000445	0.001112	0.006449
14	0.001556	0.001334	0.004446
15	0.002444	0.002222	0.004666
16	0.000665	0.001108	0.001994
17	0.001108	0.001329	0.001994
18	0.000442	0.001548	0.002875
19	0.001769	0.003981	0.006413
20	0.000442	0.003093	0.013479
21	0.001321	0.001101	0.002641
22	0.0011	0.0011	0.00418
23	0.00066	0.002639	0.001759
24	0.00022	0.003518	0.005717
25	0.001316	0.002852	0.007238
26	0.001973	0.003288	0.004823
27	0.000219	0.005261	0.007015
28	0.002191	0.003725	0.00482
29	0.003283	0.004815	0.011162
30	0.001749	0.003935	0.006995
31	0.001966	0.003276	0.002839
32	0.000873	0.000436	0.003054
33	0.001307	0.001307	0.003486
34	0.000871	0.003921	0.00305
35	0.000653	0.002395	0.008273
36	0.003262	0.013916	0.015873
37	0.005854	0.003469	0.00477
38	0.000434	0.002384	0.003252
39	0.006502	0.004768	0.008886
40	0.000217	0.000433	0.002816
41	0.001944	0.001512	0.005401
42	0.001944	0.00216	0.006263
43	0.000648	0.001943	0.004317
44	0.001293	0.002371	0.010561
45	0.00043	0.002152	0.004088
46	0.001936	0.004087	0.004517
47	0.002581	0.005162	0.006667
48	0.00086	0.003224	0.003654
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2	0.002574	0.004504	0.005147
3	0.001927	0.002355	0.005996
4	0.000214	0.000641	0.000427
5	0.00363	0.007259	0.008968
6	0.000426	0.003623	0.008739
7	0.000852	0.000852	0.001703
8	0.00149	0.002129	0.002129
9	0.001915	0.004043	0.008086
10	0.003189	0.003827	0.010417
11	0.000212	0.000637	0.004674
12	0.001486	0.006158	0.011042
13	0.004662	0.008476	0.007417
14	0.001268	0.003383	0.009302
15	0.001057	0.001268	0.003804
16	0.001055	0.002532	0.010338
17	0.001683	0.001472	0.003786
18	0.002102	0.003994	0.008408
19	0.002521	0.004412	0.007353
20	0.00042	0.00273	0.00252
21	0.001889	0.002729	0.007558
22	0.000419	0.001468	0.005663
23	0.001887	0.002936	0.00692
24	0.001884	0.002093	0.001884
25	0.003555	0.002718	0.011291
26	0.00209	0.002299	0.006062
27	0.006894	0.002089	0.008147
28	0.001671	0.004386	0.003968
29	0.000834	0.002086	0.003338
30	0.000626	0.00146	0.003755
31	0.000625	0.001668	0.004169
32	0.00125	0.003541	0.006666
33	0	0.001246	0.008725
34	0	0	0.000208
35	0.002282	0.006431	0.007469
36	0.001451	0.001036	0.003316
37	0.000414	0.001036	0.001243
38	0.000829	0.002486	0.002279
39	0.005378	0.006205	0.012411
40	0.000207	0.001859	0.003925
41	0.000826	0.003717	0.004336
42	0.003508	0.004746	0.013413
43	0	0.000619	0.00392
44	0	0.000619	0.001031
45	0	0.000412	0.000824
46	0.001234	0.003703	0.003086
47	0.002468	0.002468	0.002056
48	0.000411	0.001437	0.00349
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2	0.00041	0	0.001229
3	0.001024	0.005326	0.006146
4	0.00041	0.000615	0.001844
5	0.001434	0.001638	0.006348
6	0.00633	0.007352	0.014295
7			
8	0	0.003062	0.003879
9	0.001225	0.004491	0.004491
10	0.002441	0.004476	0.012613
11	0.002441	0.005492	0.006103
12			
13	0.001627	0.00122	0.00305
14	0.002438	0.003047	0.008938
15	0.000609	0.001218	0.001218
16	0.000406	0.000812	0.001218
17	0.000203	0.001826	0.003044
18	0.002434	0.002637	0.004868
19			
20	0.004663	0.003852	0.012975
21	0.001216	0.001216	0.005675
22	0.001013	0.003646	0.006886
23	0.003846	0.00506	0.011538
24	0.000405	0.001417	0.00506
25			
26	0.000202	0.001011	0.003033
27	0	0.000404	0.002626
28	0.001212	0.003231	0.005453
29	0.002423	0.006662	0.013324
30			
31	0.000807	0.000202	0.001413
32	0.000807	0.001614	0.003026
33	0.002824	0.005245	0.008876
34	0.001008	0.002823	0.004436
35	0.001411	0.002823	0.005242
36	0.004621	0.008037	0.010046
37	0.002411	0.002009	0.009242
38	0.002409	0.004417	0.006224
39			
40	0.001603	0.002605	0.007214
41	0.000401	0.004205	0.012216
42			
43	0.0002	0.002203	0.003604
44	0.0006	0.002002	0.005204
45	0.001	0.002201	0.006602
46	0.003998	0.006397	0.010795
47			
48	0.0006	0.002799	0.005797
49	0.000799	0.001397	0.006189
50	0	0.000399	0.001198
51	0.002391	0.000996	0.00538
52	0.000797	0.002988	0.002988
53			
54	0.000596	0.00159	0.00636
55	0.002185	0.002781	0.004767
56	0.000595	0.000198	0.004962
57	0.002381	0.003968	0.004762
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2	0.000396	0.000793	0.001784
3	0.002377	0.003169	0.006932
4	0.001584	0.002574	0.00594
5	0.00099	0.002771	0.006333
6			
7	0.001186	0.002965	0.00514
8	0.002766	0.004939	0.012445
9	0.000592	0.001185	0.002172
10	0.000986	0.001184	0.001578
11	0.000788	0.004138	0.004926
12			
13	0.002561	0.002955	0.004925
14	0.004726	0.004726	0.008467
15	0.001575	0.003347	0.007482
16	0.00059	0.000786	0.002359
17	0.000197	0.001179	0.001179
18			
19	0.001179	0.001179	0.002162
20	0.001375	0.000786	0.001375
21	0.000589	0.001964	0.003928
22	0.001374	0.000589	0.001963
23	0.000784	0.000392	0.001373
24			
25	0.000588	0.003529	0.004902
26	0.001959	0.004703	0.006858
27	0.001371	0.003721	0.011555
28	0.000587	0.003525	0.002937
29			
30	0.001371	0.002546	0.008028
31	0.000196	0.000587	0.004895
32	0.00137	0.001761	0.005284
33	0.002739	0.003718	0.006261
34	0.000391	0.000587	0.002151
35			
36	0.000782	0.001564	0.003324
37	0.001358	0.001358	0.004075
38	0.00194	0.002327	0.002521
39	0.000194	0.002521	0.004654
40	0.001162	0.002905	0.005229
41			
42	0.000775	0.002711	0.009102
43	0.001355	0.004645	0.011612
44	0.001935	0.000968	0.003096
45	0.000774	0.001548	0.002709
46			
47	0.001741	0.002322	0.008901
48	0.000966	0.002511	0.006182
49	0	0.000386	0.001159
50	0.002318	0.004443	0.005988
51	0.000965	0.001352	0.002896
52	0.001543	0.003473	0.003666
53			
54	0.000193	0.002507	0.00405
55	0.000964	0.001349	0.001156
56	0.001927	0.002505	0.008094
57	0.000193	0.001734	0.001541
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2	0.00077	0.000385	0.00077
3	0.002691	0.007879	0.016335
4	0.001344	0.0048	0.008449
5	0.000384	0.003646	0.0071
6	0.000768	0.000768	0.002494
7	0.001343	0.002877	0.00422
8	0.001722	0.001531	0.004593
9	0.003061	0.003826	0.008034
10	0.000573	0.001529	0.00344
11	0.000764	0.004203	0.007642
12	0.002285	0.003999	0.00933
13	0	0.001142	0.003426
14	0.000761	0.001142	0.002665
15	0.000571	0.001142	0.004377
16	0.003424	0.001902	0.005706
17	0.001331	0.002471	0.001711
18	0.00076	0.001709	0.003988
19	0.001138	0.001518	0.003415
20	0.00019	0.000379	0.001327
21	0.001515	0.005303	0.006818
22	0.001326	0.002083	0.006818
23	0.000189	0.001135	0.004917
24	0.002262	0.002827	0.002262
25	0.00113	0.003012	0.003012
26	0.000753	0.001317	0.001881
27	0.001127	0.001127	0.003945
28	0.000751	0.001503	0.001878
29	0.001503	0.002066	0.007514
30	0.002627	0.004128	0.007692
31	0.000748	0.003555	0.007858
32	0.00112	0.005412	0.010265
33	0.002795	0.002423	0.004659
34	0.002421	0.003724	0.007448
35	0.002048	0.005584	0.008749
36	0.000186	0.001303	0.001117
37	0.000372	0.001675	0.001489
38	0.002044	0.002416	0.004647
39	0.000928	0.004084	0.006868
40	0.000186	0.001114	0.002413
41	0.000371	0.000371	0.000371
42	0.000185	0.000926	0.002037
43	0.003332	0.004073	0.007775
44	0.001295	0.00148	0.003329
45	0	0.000185	0.000739
46	0.001294	0.001479	0.006838
47	0.000554	0.002032	0.003695
48	0.001477	0.005539	0.006831
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2	0.001477	0.002031	0.004246
3	0.000923	0.002399	0.006089
4	0.001106	0.000553	0.00129
5	0.002026	0.001289	0.003315
6	0.001473	0.003498	0.00497
7	0.000552	0.001289	0.004786
8	0.001288	0.0046	0.006256
9	0.000919	0.001471	0.00331
10	0.000184	0.003308	0.002941
11	0	0.002388	0.00955
12	0.001834	0.002751	0.004768
13	0.0011	0.00055	0.002017
14	0.002749	0.003299	0.005315
15	0.002564	0.002014	0.006043
16	0.001282	0.003845	0.007141
17	0.001465	0.001648	0.00476
18	0.00238	0.003478	0.007505
19	0.002195	0.002561	0.010608
20	0.002009	0.003105	0.00347
21	0.001643	0.001643	0.003469
22	0.000546	0.00346	0.008012
23	0.001456	0.00091	0.004731
24	0.000728	0.001637	0.001092
25	0.000727	0.002	0.004546
26	0.003818	0.006	0.015092
27	0.001817	0.00218	0.003634
28	0.000726	0.000908	0.001089
29	0	0	0.002722
30	0.002901	0.00417	0.007072
31	0.000725	0.001631	0.001088
32	0.000725	0.001994	0.010876
33	0.001268	0.004347	0.006159
34	0.000362	0.000362	0.001086
35	0.001447	0.001085	0.002352
36	0.001447	0.001628	0.004522
37	0.001989	0.002531	0.013739
38	0.000181	0.001085	0.005423
39	0.001446	0.000904	0.005422
40	0.001083	0.001264	0.001083
41	0.001262	0.001622	0.005768
42	0.001081	0.000721	0.001802
43	0.00054	0.001801	0.003062
44	0.00036	0.00054	0.00216
45	0.001979	0.004678	0.008637
46	0.002517	0.002158	0.002697
47	0.000179	0.001435	0.002152
48	0.000896	0.003046	0.001075
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2	0.000358	0.000537	0.003224
3	0.001432	0.000537	0.001253
4	0.000716	0.001074	0.003938
5	0.000537	0.000895	0.001252
6	0.002504	0.002325	0.004114
7	0.001788	0.004111	0.005899
8	0	0.001965	0.003752
9	0.002143	0.004644	0.009288
10	0.000893	0.004822	0.010538
11	0	0.000179	0.001607
12	0.000535	0.001071	0.001249
13	0.001248	0.001426	0.003387
14	0.005705	0.006952	0.011587
15	0.001778	0.002845	0.004089
16	0.0016	0.002488	0.002666
17	0.000711	0.001066	0.002843
18	0.001243	0.001598	0.004795
19	0.000888	0.00213	0.003906
20	0.000532	0.000887	0.002484
21	0.000177	0.001063	0.002834
22	0.000354	0.001062	0.00177
23	0.000177	0.001592	0.003361
24	0.000354	0.001768	0.004243
25	0.000177	0.003357	0.00689
26	0.001413	0.002826	0.001766
27	0.000706	0.000883	0.003002
28	0.000881	0.001234	0.004583
29	0.000881	0.000705	0.003347
30	0.000352	0.000352	0.004922
31	0.001581	0.001581	0.001406
32	0.001757	0.002811	0.008784
33	0.001229	0.001229	0.004214
34	0.001404	0.003686	0.00509
35	0.001053	0.001931	0.002633
36	0.000526	0.000351	0.001579
37	0.001754	0.002105	0.004561
38	0.001929	0.003332	0.00754
39	0.000526	0.001227	0.001753
40	0.000175	0.000351	0.000876
41	0.001052	0.001928	0.001753
42	0.00105	0.00175	0.002626
43	0.001574	0.002798	0.005072
44	0.001222	0.00227	0.004714
45	0.000174	0.001569	0.002441
46	0.001741	0.003483	0.004353
47	0.000696	0.003304	0.005042
48	0.002433	0.00365	0.01095
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2	0	0.000868	0.002952
3	0	0.000865	0.001557
4	0.002246	0.002419	0.004665
5	0.000518	0.002763	0.00777
6	0.000518	0.000173	0.001553
7	0	0.000517	0.00276
8	0.000172	0.000172	0.006724
9	0.001551	0.00379	0.006547
10	0.001721	0.001205	0.002582
11	0.001202	0.000172	0.001717
12	0.000515	0.000686	0.002059
13	0.000343	0.002746	0.005663
14	0	0.000515	0.00103
15	0.000685	0.001198	0.003424
16	0.00154	0.004448	0.009067
17	0.001026	0.002223	0.002394
18	0	0.000684	0.000855
19	0.004444	0.005128	0.009401
20	0.000171	0.000854	0.002903
21	0	0	0.000682
22	0.001024	0.002047	0.002559
23	0.000511	0.000682	0.002387
24	0.000682	0.001193	0.00341
25	0.000341	0.005796	0.007672
26	0.000852	0.001022	0.004942
27	0.000341	0.00017	0.002897
28	0.002725	0.003746	0.008855
29	0.000851	0.002554	0.002383
30	0.000681	0.001021	0.002043
31	0.000681	0.001872	0.006807
32	0.001189	0.005437	0.006286
33	0.00034	0.002038	0.005264
34	0.001188	0.001867	0.004243
35	0.002036	0.002036	0.002375
36	0.001187	0.001357	0.003732
37	0.008481	0.007633	0.013908
38	0.000508	0.001015	0.001523
39	0.001354	0.001354	0.0022
40	0.001354	0.003215	0.004737
41	0.000507	0.000507	0.003887
42	0.003209	0.006419	0.011824
43	0.001013	0.002365	0.004223
44	0.005065	0.00726	0.014183
45	0.000675	0.001519	0.000675
46	0.002195	0.003039	0.007934
47	0.003038	0.00422	0.00692
48	0.000506	0.001519	0.005231
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2	0.001012	0.00135	0.005062
3	0	0.003712	0.00658
4	0.000675	0.001012	0.000506
5	0.001517	0.003202	0.003202
6	0.000337	0.000842	0.000674
7	0.001011	0.00219	0.003369
8	0.000504	0.002018	0.003363
9	0.002017	0.004033	0.00605
10	0.002519	0.002519	0.003191
11	0.000671	0.003021	0.007551
12	0.000503	0.000168	0.001676
13	0.000335	0.001173	0.002179
14	0.00352	0.002179	0.005531
15	0.001339	0.002511	0.003516
16	0.001674	0.001004	0.000669
17	0.000167	0.001004	0.001171
18	0.000836	0.000669	0.005519
19	0.000836	0.001838	0.005181
20	0.001837	0.003339	0.004174
21	0.002169	0.005005	0.00634
22	0.000167	0.002167	0.003334
23	0.002166	0.002499	0.006165
24	0.001833	0.004498	0.008663
25	0.001997	0.003328	0.006822
26	0.000997	0.002494	0.003491
27	0.002326	0.006147	0.009137
28	0.001493	0.002488	0.00398
29	0.000497	0.000995	0.001492
30	0.002152	0.005297	0.006621
31	0	0.000826	0.000826
32	0.00033	0.002473	0.004452
33	0.000989	0.001813	0.003131
34	0.00033	0.002307	0.003296
35	0.000494	0.000659	0.000824
36	0.001812	0.001318	0.001977
37	0.000821	0.001971	0.004763
38	0.000327	0.002455	0.003929
39	0.000655	0.000655	0.002783
40	0.000491	0	0.000654
41	0.001308	0.001635	0.003761
42	0.001144	0.002289	0.00327
43	0.000979	0.001632	0.003265
44	0.000653	0.00049	0.002612
45	0.000653	0.005713	0.007835
46	0.002278	0.002767	0.008463
47	0.000813	0.00309	0.006504
48	0	0.000488	0.001789
49			
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2	0.001462	0.003412	0.007636
3	0.000811	0.002434	0.005517
4	0.002596	0.00357	0.007302
5	0.000973	0.001784	0.002433
6	0.000487	0.000649	0.002433
7			
8	0	0.000324	0.000811
9	0.000324	0.000811	0.001459
10	0.000649	0.000324	0.001297
11	0.000162	0.000973	0.001783
12			
13	0.00081	0.003079	0.003727
14	0	0.003889	0.005996
15	0.000324	0.002752	0.004047
16	0.000647	0.000485	0.00194
17			
18	0	0.000161	0.000807
19	0.000968	0.001775	0.001936
20	0.001451	0.001451	0.00387
21	0.00145	0.001772	0.004672
22	0.001288	0.001771	0.002093
23	0.001127	0.001932	0.004507
24			
25	0.000161	0.000322	0.000965
26	0.000804	0.000643	0.001609
27	0.001125	0.003054	0.004823
28	0.000161	0.000964	0.002249
29			
30	0.000321	0.000963	0.003048
31	0.00417	0.009622	0.017
32	0.014744	0.005128	0.007693
33	0.001121	0.002884	0.007369
34			
35	0.00016	0.00064	0.003361
36	0.00032	0.00128	0.005281
37	0.00048	0.00224	0.00608
38	0.001118	0.001757	0.003993
39	0.001277	0.001756	0.002395
40			
41	0.001435	0.000797	0.000957
42	0.000478	0.000797	0.002711
43	0	0.000319	0.001434
44	0.004614	0.004136	0.009864
45	0.000794	0.002065	0.005084
46			
47	0.003336	0.004448	0.008577
48	0.000635	0.000794	0.001747
49	0.001746	0.002223	0.002699
50	0.000952	0.001429	0.00381
51			
52	0	0.00111	0.002695
53	0.007768	0.007451	0.01728
54	0.003485	0.004753	0.013149
55	0.001267	0.001425	0.00285
56	0.000633	0.000633	0.001108
57			
58	0.000475	0.001266	0.002057
59			
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2	0.000633	0.004271	0.00522
3	0.001265	0.001265	0.003637
4	0.000158	0.001739	0.002846
5	0.00237	0.004898	0.006793
6	0.000947	0.000316	0.001105
7			
8	0	0.000474	0.001263
9	0.000316	0.000789	0.001578
10	0.000316	0.000789	0.001736
11	0.000316	0.000947	0.003472
12			
13	0.002525	0.003156	0.008521
14	0.000789	0.001577	0.002524
15	0.002208	0.002681	0.007571
16	0.000631	0.002838	0.002365
17	0.001103	0.003309	0.001576
18	0.000157	0.001417	0.00378
19	0.002518	0.003462	0.005508
20	0.000944	0.001573	0.003303
21	0.000944	0.002988	0.002673
22			
23	0	0.001571	0.0044
24	0.001728	0.002199	0.003456
25	0.001257	0.001257	0.002356
26	0.000157	0.000471	0.000941
27			
28	0	0.000784	0.003292
29	0.001409	0.001096	0.003131
30	0.000313	0.001722	0.002035
31	0.000939	0.001565	0.001252
32	0.001721	0.003911	0.006258
33			
34	0	0.002345	0.00594
35	0.000156	0.001876	0.000781
36	0.000781	0.001406	0.003905
37	0.00203	0.00531	0.010932
38	0.000156	0.000937	0.001561
39	0.001561	0.002186	0.003903
40	0.000156	0.000468	0.000624
41	0.000468	0.000624	0.00234
42	0.001248	0.001248	0.00234
43	0.001092	0.002807	0.004835
44	0.000936	0.004055	0.008577
45	0.000312	0.000312	0.002338
46			
47	0	0.000156	0.00187
48	0.001246	0.001402	0.003115
49	0.002804	0.004205	0.005451
50	0.000934	0.00249	0.004514
51	0.000156	0.000622	0.004513
52	0.001711	0.001711	0.006688
53	0.000466	0.001709	0.002331
54	0.000311	0.001398	0.00264
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2	0.002638	0.001862	0.004345
3	0.00062	0.00062	0.002478
4	0.000619	0.001083	0.002938
5	0.001545	0.002935	0.002626
6	0.000616	0.000771	0.002466
7	0.001232	0.002465	0.003543
8	0.000308	0.001231	0.002154
9	0.001231	0.002154	0.003999
10	0.000769	0.001077	0.002769
11	0	0.000769	0.001076
12	0.001383	0.001383	0.000615
13	0.000768	0.001229	0.001382
14	0.000461	0.001536	0.003686
15	0.00215	0.001382	0.003532
16	0.000766	0.002912	0.007203
17	0.000766	0.003369	0.008422
18	0.000459	0.004287	0.004287
19	0.001531	0.002296	0.005357
20	0.001683	0.001683	0.003212
21	0.000459	0.001682	0.002905
22	0.002293	0.001987	0.004279
23	0.001374	0.000763	0.004275
24	0.000458	0.001373	0.003968
25	0.00061	0.002594	0.003815
26	0.000763	0.000915	0.003203
27	0.001981	0.002742	0.00518
28	0.000761	0.000761	0.003654
29	0.000457	0.001065	0.003044
30	0.000456	0.000456	0.003043
31	0.000304	0.000304	0.002282
32	0.002432	0.00304	0.006232
33	0.001823	0.004406	0.010027
34	0.000152	0.003948	0.006833
35	0.000455	0.001062	0.002276
36	0.001971	0.003639	0.006824
37	0.000152	0.000303	0.001213
38	0.000303	0.000454	0.000454
39	0.00212	0.003029	0.004846
40	0	0.000454	0.001816
41	0.001511	0.001813	0.005136
42	0.001208	0.004076	0.004378
43	0	0.000452	0.001357
44	0.001507	0.000754	0.004069
45	0.000904	0.005725	0.006629
46	0.000603	0.000301	0.000753
47	0.001506	0.001355	0.002109
48	0.00241	0.002108	0.004217
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2	0.000752	0.003158	0.004963
3	0.000902	0.001053	0.003759
4	0.000901	0.001051	0.002553
5	0	0	0.001351
6			
7	0.00015	0.0015	0.00105
8	0.001348	0.003446	0.007641
9	0.000899	0.000599	0.003295
10	0.002096	0.000898	0.003293
11	0.001345	0.001794	0.00598
12	0.001793	0.002391	0.004782
13	0.000896	0.001046	0.002988
14	0.001642	0.003733	0.006869
15	0.001194	0.003732	0.010301
16	0.001344	0.002836	0.005076
17	0.001192	0.001937	0.004767
18	0.000149	0.000446	0.001041
19	0.000892	0.001932	0.004905
20	0.000594	0.00104	0.003269
21	0.000892	0.001932	0.003863
22	0	0.000446	0.001337
23	0.000742	0.002672	0.005493
24	0.000148	0.000445	0.002523
25	0.001483	0.001631	0.003262
26	0.000889	0.000296	0.000593
27	0.001925	0.004589	0.008883
28	0.000592	0.001184	0.002219
29	0.00133	0.001773	0.002364
30	0.001032	0.001917	0.004129
31	0.000295	0.000737	0.00398
32	0.001179	0.001915	0.004273
33	0.000442	0.000442	0.00162
34	0.002207	0.000883	0.00309
35	0.000147	0.001324	0.003384
36	0.000147	0.001765	0.002206
37	0	0.001029	0.003527
38	0.000441	0.002203	0.002203
39	0.002348	0.000293	0.003668
40	0.000147	0.001172	0.001758
41	0.000732	0.001318	0.00249
42	0.000146	0.000293	0.001757
43	0.000731	0.001316	0.003949
44	0.000146	0.000439	0.00234
45	0	0.000292	0.001023
46	0.001461	0.003069	0.004092
47	0.001897	0.001459	0.006857
48	0.000584	0.000438	0.001751
49	0.000871	0.001016	0.001597
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2	0.001305	0.000725	0.00203
3	0	0.000869	0.002753
4	0	0.000145	0.002463
5	0.00029	0.002316	0.004488
6	0.000289	0.000579	0.002026
7	0.000289	0.001591	0.00188
8	0.000289	0.001446	0.003181
9	0.001156	0.004623	0.005056
10	0.000144	0.003177	0.005776
11	0.002166	0.005631	0.013571
12	0.000866	0.001155	0.001443
13	0.00101	0.000866	0.001732
14	0.000577	0.000865	0.003028
15	0	0.000288	0.003028
16	0.001296	0.001584	0.002016
17	0	0.000719	0.00187
18	0	0.000144	0.001726
19	0.000575	0.000575	0.001869
20	0.001293	0.000862	0.002872
21	0.000431	0.000287	0.001292
22	0.001292	0.001149	0.003589
23	0.000574	0.000718	0.00201
24	0	0.003297	0.005161
25	0.001433	0.00215	0.004299
26	0.001146	0.001862	0.003008
27	0.003723	0.003866	0.008591
28	0.001431	0.000858	0.001288
29	0.000572	0	0.000143
30	0.000572	0.001573	0.001287
31	0.000572	0.001001	0.000715
32	0.000715	0.00143	0.001715
33	0.000714	0.001998	0.002569
34	0.000713	0.000713	0.002423
35	0.00057	0.000855	0.003705
36	0.000997	0.002848	0.004272
37	0.000569	0.001708	0.002278
38	0.002846	0.004554	0.010247
39	0.000711	0.00128	0.002843
40	0.000284	0.00071	0.000853
41	0.000142	0.000426	0.00071
42	0.000142	0.00071	0.002271
43	0.0034	0.004108	0.010058
44	0	0.001983	0.003966
45	0.000707	0.001273	0.006366
46	0.00113	0.001695	0.002401
47	0.000423	0.001129	0.002681
48	0.000988	0.003245	0.004233
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2	0	0.000704	0.000986
3	0.000844	0.001407	0.001126
4	0.001266	0.002953	0.006469
5	0.000703	0.002109	0.003937
6	0.001966	0.002528	0.007443
7	0.000281	0.001965	0.002245
8	0.000702	0.001684	0.004209
9	0.000701	0.004068	0.007855
10	0.000701	0.000982	0.003786
11	0.00042	0.000981	0.003642
12	0.00028	0.00056	0.001121
13	0.00098	0.00014	0.0007
14	0.00056	0.00112	0.003918
15	0.000979	0.001679	0.002799
16	0.0007	0.002798	0.005317
17	0	0.00014	0.001259
18	0.002093	0.00279	0.003628
19	0.002093	0.002651	0.004464
20	0.000139	0.002231	0.002231
21	0.000418	0.000418	0.001952
22	0.000418	0.001532	0.005572
23	0.000557	0.00181	0.002228
24	0.000139	0.002782	0.005147
25	0.000417	0.000695	0.000974
26	0.000278	0.000556	0.001529
27	0.000695	0.000139	0.002502
28	0.000277	0.000971	0.001387
29	0.000971	0.00111	0.002497
30	0	0.000139	0.00194
31	0.000693	0.001385	0.001524
32	0.000415	0.000691	0.001382
33	0.000415	0.001659	0.002902
34	0.000138	0.000965	0.00524
35	0.000276	0.000138	0.000413
36	0.004408	0.005786	0.010469
37	0.000275	0.0011	0.003301
38	0	0.000275	0.000688
39	0.001238	0.004125	0.009213
40	0.001375	0.002612	0.003574
41	0.001236	0.001511	0.002472
42	0.000686	0.002195	0.004802
43	0.001234	0.00192	0.006446
44	0.003154	0.002331	0.005485
45	0.001097	0.000548	0.002331
46	0.000685	0.001508	0.003976
47	0.000274	0.000274	0.001505
48	0.000137	0.001231	0.002052
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2	0.000958	0.001368	0.004104
3	0.000547	0.001094	0.002188
4	0.000956	0.000819	0.001638
5	0.001364	0.001637	0.003274
6	0	0	0.002589
7			
8	0.000954	0.000681	0.001771
9	0.001089	0.001906	0.004085
10	0.000272	0.00068	0.001769
11	0.000815	0.002039	0.004077
12	0.001223	0.001766	0.003804
13			
14	0	0.000814	0.000543
15	0.000678	0.000271	0.00312
16	0.000136	0.00217	0.006373
17	0.000813	0.002305	0.002712
18	0.000136	0.000813	0.001084
19	0.000271	0.000677	0.003927
20			
21	0	0.000406	0.00176
22	0.00027	0.000676	0.003786
23	0.00027	0.001622	0.000946
24	0.000811	0.001622	0.002838
25	0.000135	0.000946	0.002297
26	0.00027	0.002026	0.001621
27	0.001486	0.002296	0.00108
28	0.001349	0.001888	0.002563
29	0.000944	0.002427	0.004179
30	0.000808	0.000135	0.000404
31			
32	0	0.000269	0.004311
33	0.002155	0.002424	0.003906
34	0.001749	0.002421	0.00417
35	0.000942	0.001211	0.002287
36	0.001075	0.0043	0.006719
37	0.000672	0.001881	0.004702
38	0.000806	0.002417	0.00376
39	0.001476	0.000671	0.002817
40	0.001072	0.001743	0.003351
41	0.001205	0.001874	0.005488
42	0.001071	0.001606	0.004283
43	0.000937	0.002944	0.005486
44	0.000134	0.000268	0.002141
45	0.000803	0.001606	0.002275
46	0.00214	0.002542	0.004013
47	0.000936	0.000669	0.00107
48	0.000401	0.001471	0.001337
49	0.000535	0.000401	0.000668
50	0.000935	0.003074	0.003074
51	0.000668	0.003073	0.005345
52	0.002271	0.004008	0.00628
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2	0.000267	0.001602	0.004006
3	0.000667	0.000801	0.000934
4	0.000133	0.002135	0.002802
5	0.001201	0.000801	0.000934
6	0.000667	0.000534	0.002001
7	0.001067	0.001868	0.002935
8	0.0004	0.000133	0.002534
9	0.0008	0.001867	0.002934
10	0.001199	0.001199	0.001999
11	0	0.001465	0.002531
12	0.000932	0.000932	0.001997
13	0.00133	0.002659	0.006249
14	0.002659	0.005584	0.006913
15	0.000266	0.000664	0.001328
16	0.000797	0.002258	0.003453
17	0.001461	0.003453	0.00518
18	0.001063	0.000531	0.002922
19	0.000133	0.003452	0.00624
20	0.000663	0.000265	0.001194
21	0.000265	0.000398	0.001326
22	0.000397	0.000927	0.002385
23	0	0	0.000132
24	0.001987	0.004105	0.006489
25	0.000397	0.000265	0.001191
26	0.000926	0.00172	0.001587
27	0.000132	0.001058	0.00291
28	0.000661	0.000264	0.001454
29	0.001321	0.001454	0.001718
30	0.000925	0.002642	0.007531
31	0	0.000132	0
32	0.000263	0.000922	0.001186
33	0.000527	0.000395	0.00158
34	0.001315	0.002104	0.003814
35	0	0.000789	0.002891
36	0.001182	0.001576	0.002232
37	0.001444	0.000788	0.003282
38	0.000918	0.001443	0.002098
39	0.001049	0.00236	0.004458
40	0.000524	0.001048	0.003407
41	0.001439	0.003009	0.003401
42	0.002093	0.002223	0.003008
43	0.0017	0.001438	0.001961
44	0.001568	0.001829	0.002352
45	0.000131	0.001959	0.001437
46	0.000522	0.001436	0.002611
47	0.00013	0.000652	0.000522
48	0.000652	0.002348	0.003131
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2	0.001303	0.002606	0.006385
3	0.001823	0.001042	0.003647
4	0.001172	0.004296	0.007812
5	0.00065	0.00117	0.00273
6	0	0.00013	0.00117
7	0.00013	0.001169	0.002078
8	0.001298	0.002466	0.004024
9	0.001168	0.001168	0.002725
10	0.00013	0.000389	0.003503
11	0.001556	0.000778	0.000778
12	0.000259	0.001166	0.002462
13	0.000777	0.001424	0.005179
14	0.000776	0.001294	0.002846
15	0.001035	0.000388	0.001035
16	0.00155	0.002455	0.005814
17	0	0.000388	0.001292
18	0.001679	0.001033	0.003228
19	0.000645	0.001807	0.004904
20	0.000774	0.002323	0.003227
21	0.002192	0.001934	0.003352
22	0.001289	0.000644	0.004253
23	0.000515	0.001932	0.00322
24	0.000901	0.001803	0.00425
25	0.001287	0.001802	0.002704
26	0	0.000129	0.001158
27	0.000386	0.002057	0.004757
28	0.000128	0.000385	0.001027
29	0.000514	0.001156	0.002311
30	0.001284	0.00154	0.004236
31	0.00077	0.002181	0.006416
32	0.000639	0.000256	0.001918
33	0.000382	0.000255	0.001147
34	0.000127	0.000637	0.002039
35	0	0.001147	0.003567
36	0.000637	0.001146	0.002546
37	0.000127	0.000509	0.002798
38	0.001016	0.000508	0.000762
39	0.00381	0.008635	0.014604
40	0.000127	0.000888	0.002158
41	0.000254	0.000508	0.001396
42	0.002664	0.003172	0.009135
43	0.000633	0.000506	0.000633
44	0.001137	0.00139	0.001516
45	0.001642	0.001768	0.006315
46	0	0.000755	0.002768
47	0.001006	0.000754	0.00176
48	0.000251	0.000126	0.000628
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2	0	0.000125	0.001129
3	0.000753	0.000753	0.003638
4	0.000251	0.000501	0.00163
5	0.001253	0.001629	0.002507
6	0.000626	0.000751	0.003005
7	0.00025	0.000875	0.001251
8	0.000998	0.002121	0.00237
9	0.000249	0.00162	0.00299
10	0.001618	0.002863	0.004854
11	0.000621	0.001367	0.001491
12	0.000497	0.000373	0.001615
13	0.000372	0.001117	0.00335
14	0.000248	0.000248	0.001115
15	0.001239	0.002725	0.003716
16	0.001238	0.003094	0.003713
17	0.000743	0.001238	0.00297
18	0.000989	0.000742	0.002968
19	0.000247	0.001977	0.00346
20	0.000865	0.001236	0.001977
21	0.000371	0.001112	0.002717
22	0.001111	0.002346	0.002963
23	0.00037	0.00074	0.001974
24	0.00111	0.001726	0.003083
25	0.000987	0.001356	0.002343
26	0	0.00074	0.002836
27	0.000493	0.002094	0.006035
28	0.000369	0.001724	0.003325
29	0.000123	0.000739	0.001478
30	0.000492	0.001229	0.003809
31	0.000369	0.000246	0.00086
32	0.000368	0.000368	0.000859
33	0.000736	0.000736	0
34	0.000123	0.001594	0.002452
35	0.000122	0.000489	0.003303
36	0.001956	0.002935	0.005135
37	0	0.000122	0.000978
38	0.000366	0.001099	0.004275
39	0.001465	0.001343	0.001343
40	0.000488	0.000854	0.00244
41	0.000366	0.000854	0.002318
42	0.000244	0.000122	0.001219
43	0.000731	0.002314	0.002923
44	0.001096	0.002679	0.00755
45	0.000243	0.000486	0.000851
46	0.000121	0.001457	0.001457
47	0.000121	0.000606	0.001455
48	0.000727	0.002303	0.005577
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2	0.000848	0.001332	0.002422
3	0.000242	0.000363	0.001211
4	0.000484	0.000726	0.00121
5	0.000121	0.000484	0.000847
6	0.002176	0.003627	0.005924
7	0.000241	0.000121	0.000724
8	0.000483	0.000483	0.001206
9	0.000241	0.000603	0.000241
10	0.000362	0.000241	0.001205
11	0.000964	0.001446	0.002892
12	0.000602	0.001083	0.001926
13	0.00048	0.00036	0.00096
14	0.001319	0.002638	0.003717
15	0.001317	0.001437	0.000599
16	0.000359	0.000598	0.001795
17	0.000239	0.000835	0.003102
18	0.000715	0.002981	0.006796
19	0.001786	0.005358	0.009407
20	0.000238	0.000595	0.002143
21	0.001309	0.001428	0.002262
22	0.000357	0.001904	0.002975
23	0.000119	0.000714	0.001666
24	0.000713	0.002495	0.004515
25	0.000356	0.000713	0.001425
26	0.000119	0.000238	0.000713
27	0.000831	0.001306	0.002494
28	0	0.000594	0.00095
29	0.000831	0.001781	0.002256
30	0	0.00095	0.001781
31	0.000237	0.000831	0.001306
32	0.000712	0.000593	0.002254
33	0.001542	0.002372	0.003557
34	0.001067	0.002016	0.005217
35	0.000711	0.001778	0.002607
36	0.000237	0.000473	0.001419
37	0.000355	0.000473	0.001537
38	0	0.000473	0.001537
39	0.000354	0.002598	0.002834
40	0.001179	0.001179	0.00224
41	0	0.000354	0.000236
42	0.001179	0.001768	0.003065
43	0.001414	0.002827	0.004123
44	0.000353	0.00106	0.001413
45	0.000471	0.001295	0.00259
46	0.000353	0.001177	0.002354
47	0.000588	0.001764	0.00294
48	0.001293	0.000823	0.003174
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2	0.000235	0.000235	0.000704
3	0.000587	0.000469	0.001408
4	0	0	0.000703
5	0.001172	0.001172	0.003399
6	0.000234	0.001171	0.002342
7	0.001168	0.001285	0.00222
8	0.000117	0.000467	0.001519
9	0.00035	0.001517	0.002684
10	0.00175	0.00175	0.0028
11	0.000117	0.000466	0.000583
12	0.001398	0.000466	0.002214
13	0.000116	0.000699	0.001631
14	0.001745	0.002326	0.003606
15	0.000465	0.001627	0.00395
16	0.000697	0.000349	0.001046
17	0.001857	0.001625	0.001393
18	0.000348	0.000929	0.003599
19	0.001623	0.001971	0.002667
20	0.001507	0.002203	0.003942
21	0.000695	0.003012	0.002664
22	0.000695	0.001274	0.003243
23	0.001964	0.001386	0.003119
24	0.000692	0.001269	0.002654
25	0.000576	0.000922	0.001843
26	0.000115	0.000921	0.001726
27	0.00069	0.0023	0.005751
28	0.000115	0.00069	0.00046
29	0.000345	0.000345	0.002528
30	0.000459	0.000804	0.003216
31	0.000459	0.000459	0.002408
32	0.000115	0.000115	0.000573
33	0.001031	0.00252	0.004467
34	0.001145	0.000687	0.002634
35	0.00103	0.001832	0.002862
36	0.001831	0.00309	0.006065
37	0.002057	0.001028	0.002285
38	0.0008	0.001714	0.003884
39	0.000685	0.000914	0.001599
40	0.000456	0.001255	0.00194
41	0.000571	0.002511	0.003081
42	0.001141	0.002852	0.003651
43	0.00057	0.001141	0.002966
44	0.001596	0.001482	0.003534
45	0.000342	0.000456	0.000456
46	0.000683	0.00057	0.001367
47	0.00148	0.001935	0.004212
48	0.000796	0.001365	0.004094
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2	0.000114	0.000568	0.001932
3	0	0.000341	0.00125
4	0.000454	0.000681	0.001361
5	0.000113	0.001586	0.002153
6	0	0.000113	0.001132
7	0.00034	0.000679	0.001699
8	0.000679	0.000906	0.001245
9	0.000905	0.000678	0.002375
10	0.000905	0.00147	0.001696
11	0.000791	0.001583	0.003957
12	0.000113	0.000339	0.000339
13	0.001017	0.000678	0.001582
14	0.00113	0.002033	0.00497
15	0.000226	0.001581	0.003613
16	0.000451	0.002255	0.002931
17	0.000789	0.000564	0.001804
18	0.000113	0.001352	0.004168
19	0.000225	0.000562	0.0009
20	0.001685	0.003033	0.008536
21	0.001235	0.000561	0.002133
22	0.000112	0.000112	0.000898
23	0.000112	0.000786	0.000786
24	0.001122	0.001346	0.002244
25	0.000897	0.004149	0.003252
26	0.000561	0.000336	0.002916
27	0.001233	0.001681	0.001569
28	0.001457	0.000897	0.003698
29	0.000336	0.000896	0.001008
30	0	0.000448	0.001119
31	0.000447	0.000782	0.001453
32	0	0.000447	0.001675
33	0.00067	0.002232	0.002567
34	0.000223	0.000334	0.001337
35	0.002773	0.002329	0.008096
36	0.000333	0.001109	0.001774
37	0.000111	0	0.001219
38	0.000222	0.000111	0.00277
39	0.000553	0.002213	0.002877
40	0.001328	0.000885	0.000885
41	0.000332	0.000111	0.000332
42	0.000221	0.000885	0.002212
43	0.000442	0.000884	0.001658
44	0.000442	0.000442	0.000774
45	0.000221	0.000773	0.001326
46	0.000331	0.000221	0.000331
47	0.001324	0.001875	0.00342
48	0.000441	0.000993	0.000883
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2	0.00011	0.000993	0.002095
3	0	0	0.000772
4	0.001653	0.001323	0.002315
5	0.002535	0.003747	0.006391
6	0.000661	0.000882	0.003085
7	0.001211	0.000661	0.002202
8	0	0	0.000769
9	0.000659	0.001099	0.001319
10	0.001537	0.001427	0.001537
11	0.000988	0.000878	0.001756
12	0.000439	0.001865	0.003839
13	0.000548	0.000986	0.003069
14	0.001095	0.002518	0.004161
15	0.000328	0.000766	0.00208
16	0.001642	0.000547	0.002846
17	0.000547	0.001422	0.001531
18	0.002295	0.002732	0.005902
19	0.000765	0.001966	0.002512
20	0.000764	0.000873	0.000873
21	0.001636	0.001091	0.003163
22	0.000218	0.002399	0.005344
23	0.000982	0.001418	0.00229
24	0	0	0.001308
25	0.000218	0.000871	0.001197
26	0.000218	0.001742	0.002939
27	0.001197	0.000653	0.000544
28	0.001523	0.001849	0.002393
29	0.001849	0.002501	0.003915
30	0.000652	0.000652	0.001086
31	0.000977	0.00152	0.003041
32	0.000434	0.000326	0.000109
33	0.000651	0.00141	0.002061
34	0.000759	0.001084	0.001842
35	0	0.000758	0.001625
36	0.000217	0.00065	0.001192
37	0.001408	0.002491	0.003574
38	0.001298	0.001731	0.002596
39	0.000757	0.000649	0.001514
40	0.000216	0.001297	0.002811
41	0.001513	0.001189	0.002594
42	0.000756	0.001729	0.002809
43	0.00054	0.002052	0.003456
44	0.000432	0.001404	0.001188
45	0.001187	0.001079	0.00313
46	0.000539	0.000647	0.000755
47	0	0.000647	0.001078
48	0	0	0.001078
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2	0.002155	0.001939	0.003017
3	0.000539	0.000862	0.002478
4	0.000646	0.000969	0.002476
5	0.000431	0.003768	0.004952
6	0.000215	0.000322	0.000322
7	0.000859	0.001289	0.00376
8	0	0.000429	0.001502
9	0.000536	0.000536	0.002252
10	0.002359	0.002359	0.003967
11	0.000107	0.000322	0.001287
12	0.000428	0.001605	0.002567
13	0.000214	0.000535	0.000642
14	0.001604	0.005775	0.007593
15	0	0.000107	0.000321
16	0.000855	0.002993	0.004169
17	0.000641	0.000214	0.000748
18	0.001496	0.001496	0.003633
19	0.000427	0.000641	0.000962
20	0.000427	0.001175	0.001389
21	0	0.00064	0.001921
22	0.000213	0.000427	0.000427
23	0.000213	0.00032	0.001066
24	0.000426	0.000106	0.000958
25	0	0.000213	0.001489
26	0.000638	0.002446	0.004786
27	0.000213	0.000425	0.001488
28	0.000425	0.000106	0.000637
29	0.000637	0.000637	0.001911
30	0.000636	0.000954	0.002331
31	0.001059	0.001694	0.002224
32	0	0.000423	0.001693
33	0.003595	0.005076	0.011104
34	0.000422	0.000845	0.000739
35	0.000528	0.000844	0.004644
36	0.000422	0.000844	0.001161
37	0.000844	0.001688	0.004325
38	0.000211	0.000316	0.000843
39	0.00158	0.001264	0.003159
40	0.000421	0.000947	0.001578
41	0.001368	0.001578	0.001683
42	0.000842	0.00263	0.006313
43	0.00021	0.000421	0.001262
44	0.001472	0.003575	0.004837
45	0.000525	0.00021	0.00105
46	0.00063	0.000735	0.001785
47	0.001154	0.002099	0.003778
48	0.000525	0.000944	0.002098
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2	0.001469	0.001678	0.003042
3	0.000838	0.001885	0.004293
4	0	0	0.001152
5	0.001779	0.001255	0.002511
6	0.000732	0.002092	0.002615
7	0.001464	0.00115	0.001464
8	0.002718	0.00345	0.01129
9	0.000627	0.003448	0.005224
10	0.000104	0.00073	0.002087
11	0	0.000209	0.000834
12	0.001563	0.003022	0.006878
13	0.002084	0.002501	0.005106
14	0	0.000208	0.00052
15	0.001144	0.001248	0.004055
16	0	0	0.001038
17	0.00083	0.001764	0.003114
18	0.00083	0.001557	0.002905
19	0.00083	0.000622	0.001245
20	0.001139	0.002382	0.003107
21	0.000104	0.000725	0.002485
22	0.000621	0.001448	0.002587
23	0.000207	0.000724	0.003414
24	0.001965	0.002378	0.004239
25	0.000103	0.001446	0.00372
26	0.00062	0.001446	0.002273
27	0.000309	0.000412	0.000412
28	0.000309	0.002679	0.003915
29	0.000618	0.003089	0.006075
30	0.000308	0.000719	0.002363
31	0.001232	0.00154	0.002772
32	0.000924	0.001334	0.004002
33	0.000513	0.000718	0.001333
34	0.001127	0.001537	0.004099
35	0.000922	0.001434	0.00297
36	0	0.000205	0.000717
37	0.001536	0.002458	0.005018
38	0	0.001637	0.000921
39	0.000102	0.000307	0.001636
40	0.000613	0.000818	0.003679
41	0.001124	0.001124	0.002044
42	0.000816	0.001225	0.003062
43	0.000408	0.000408	0.001733
44	0.000917	0.002446	0.004383
45	0	0.000306	0.000204
46	0.001018	0.000611	0.001425
47	0.000305	0.002646	0.002442
48	0.000203	0.000305	0.000508
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2	0.00122	0.002033	0.002541
3	0.000305	0.000508	0.001829
4	0.000203	0.000608	0.00223
5	0.000304	0.000101	0.000912
6	0.001216	0.002128	0.003344
7	0.001215	0.001215	0.003138
8	0.001012	0.001214	0.00263
9	0.000101	0.00091	0.00182
10	0	0.000101	0.00202
11	0.000101	0.000302	0.001209
12	0	0.002518	0.005842
13	0.000101	0.000302	0.000402
14	0.000402	0	0.000905
15	0.003916	0.001205	0.003514
16	0.000502	0.000602	0.00251
17	0.000502	0.001304	0.000803
18	0.0001	0.001003	0.001304
19	0.000802	0.001203	0.003308
20	0.0002	0.001302	0.002104
21	0	0.0002	0.0004
22	0.001399	0.001299	0.005397
23	0.000599	0.000399	0.000699
24	0.000399	0	0.0003
25	0.000399	0.0002	0.000299
26	0.000498	0.001396	0.003589
27	0.000897	0.000997	0.003189
28	0.000199	0.000398	0.002291
29	0.000299	0.000398	0.000697
30	0	0.001394	0.002291
31	0.000697	0.000498	0.001095
32	0	0.000597	0.001194
33	0.000597	0.001392	0.002585
34	0.000397	0.000199	0.001291
35	0.001092	0.00129	0.001886
36	0.000694	0.001488	0.002381
37	0.000892	0.000991	0.001685
38	0.000297	0.000793	0.001486
39	0.000991	0.001189	0.003269
40	0.000594	0.001881	0.006433
41	0.000494	0.001187	0.002175
42	0.00079	0.000692	0.003754
43	0.000789	0.001973	0.001677
44	0	0.000394	0.001871
45	0.000197	0.000492	0.00118
46	0.000196	0.000196	0.002455
47	9.82E-05	0.000785	0.000687
48	0	0.000982	0.001767

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2	0.000588	0.001078	0.001569
3	0.000294	0.002644	0.003329
4	0.001076	0.000978	0.000978
5	0.000196	0.000782	0.001076
6	0.001173	0.002345	0.00342
7	0.000682	0.000877	0.00302
8	0.000195	0.001461	0.002533
9	0.000681	0.00146	0.002433
10	0.000486	0.000973	0.001362
11	9.72E-05	0.000292	0.000778
12	0	0.000388	0.002137
13	0	0.004561	0.003203
14	9.7E-05	0.000291	0.001067
15	0.000194	0.000774	0.001743
16	9.68E-05	0.000387	0.001258
17	0.00029	0.00029	0.001741
18	9.67E-05	0.000483	0.000483
19	0.001641	0.001641	0.004826
20	0.000772	0.002026	0.002797
21	0.002025	0.001736	0.004629
22	0.001061	0.001639	0.003375
23	0.000385	0.0026	0.001734
24	0.000193	0.000289	0.00077
25	0.000674	0.00077	0.002118
26	0.000384	0.002014	0.002398
27	0.000383	0.000192	0.001534
28	0.000191	0.000957	0.001818
29	0.00086	0.000382	0.001242
30	0.00086	0.001433	0.003344
31	0.00086	0.00086	0.002866
32	0.000764	0.000573	0.001909
33	0.000572	0.001812	0.003625
34	0.000191	0.000286	0.000763
35	0.000763	0.001621	0.003815
36	0	0.000381	0.000572
37	0.00019	0.000571	0.002
38	9.5E-05	9.5E-05	0.000475
39	0.001331	0.000665	0.001806
40	0.00019	0.000379	0.000853
41	0.000758	0.001422	0.003317
42	0.000568	0.000947	0.001232
43	0.001042	0.001421	0.002557
44	9.46E-05	0.001514	0.004353
45	0.000378	0.003593	0.003404
46	0.000472	0.000661	0.000661
47	0.000189	0.001227	0.001888
48	0.000377	9.43E-05	0.000943
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2	0.000377	0.000754	0.000849
3	9.42E-05	0.001224	0.001789
4	0.000941	0.001035	0.001505
5	0.001127	0.001127	0.003475
6	0.000282	0.001314	0.002629
7	0.000376	0.000563	0.001596
8	0	0.000281	0.000751
9	0.001407	0.003284	0.003565
10	0.001032	0.002064	0.001689
11	0.00075	0.001125	0.002812
12	0.000655	0.00131	0.004305
13	0.000841	0.000654	0.001589
14	0.001309	0.001215	0.002617
15	0.001121	0.001028	0.002523
16	0.000467	0.000654	0.001307
17	0.00028	0.000374	0.001588
18	0.000747	0.001307	0.003267
19	0.00056	0.000373	0.002147
20	0.00028	0.001026	0.002892
21	0.000651	0.000744	0.001768
22	0.000186	0.000279	0.001394
23	0.000557	0.000836	0.001951
24	0.000836	0.000743	0.001765
25	0.000278	0.001577	0.001577
26	0.000278	0.000927	0.002504
27	0.002132	0.002874	0.004543
28	0.000927	0.00102	0.003616
29	0.00037	0.000555	0.001759
30	9.25E-05	0.000833	0.000833
31	0.00037	0.000832	0.002775
32	0.001108	0.000646	0.002031
33	0.000738	0.000738	0.001107
34	0.000369	0.001567	0.002673
35	0.000184	0.001198	0.00129
36	0.002211	0.002303	0.003132
37	0.000737	0.001934	0.003777
38	0.000829	0.000737	0.00175
39	0.000645	0.001197	0.002395
40	9.2E-05	0.001012	0.002393
41	0.001928	0.001377	0.00404
42	0.000551	0.001193	0.003213
43	0.000275	0.000918	0.001193
44	0	9.18E-05	0.001193
45	0	0.000275	0.000459
46	0.000367	0.000458	0.0011
47	0.001283	0.001467	0.003575
48	9.16E-05	0.000183	0.00055
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2	0.000183	0.000183	0.000732
3	0.00183	0.002836	0.005398
4	9.14E-05	0.000274	0.001097
5	0.001462	0.003381	0.002742
6	0.000366	0.001279	0.002376
7	0.000183	0.000914	0.002466
8	0.000183	0.000183	0.000639
9	9.13E-05	0.000639	0.000639
10	0.000548	0.001096	0.002283
11	0.000456	0.001186	0.003286
12	0.001368	0.001459	0.002372
13	9.12E-05	0.00073	0.001095
14	0.000638	0.001185	0.003555
15	0.000911	0.000546	0.001366
16	0.000819	0.000455	0.001547
17	0.000364	0.001547	0.002184
18	0.000455	0.001545	0.001091
19	0.000454	0.001818	0.003908
20	0.000454	0.000272	0.000545
21	0.000363	0.001271	0.002087
22	0.000363	0.0029	0.000816
23	0.000181	0.000543	0.000995
24	9.05E-05	0.000543	0.001086
25	0.001261	0.001261	0.003873
26	0.001802	0.002612	0.002432
27	0	0.00027	0.001441
28	0.00018	0.00036	0.00117
29	0.00081	0.00225	0.002789
30	0.000809	0.001889	0.003957
31	0.000359	0.001168	0.001976
32	0.000539	0.001616	0.002335
33	0	0.000449	0.001167
34	8.97E-05	0.000628	0.001345
35	0.000269	0.002869	0.006367
36	0	0.001165	0.001613
37	0.000269	0.001165	0.001882
38	0.000985	0.001522	0.004746
39	0.000626	0.000179	0.000716
40	0.000447	0.001253	0.002774
41	0.00161	0.001074	0.003221
42	8.92E-05	0.000803	0.001694
43	0	0	0.000624
44	0.000534	0.00098	0.001514
45	0.000801	0.001067	0.001957
46	0.0008	0.001156	0.003112
47	0.000178	0.001066	0.001511
48	0.000533	0.00071	0.000799
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2	0.000266	0.000621	0.000888
3	0.000355	0.000444	0.000532
4	0.000177	8.87E-05	0.001331
5	0.000974	0.000177	0.001771
6	8.86E-05	0.000531	0.002214
7	0.000708	0.001061	0.003007
8	0.000265	0.000265	0.000707
9	0.000618	0.00053	0.002297
10	0.00097	0.000706	0.002999
11	0.000176	0.000882	0.001941
12	0.001058	0.001322	0.003349
13	0.000705	0.001498	0.002467
14	8.81E-05	0.001409	0.002025
15	0.000792	0.001144	0.00308
16	0.00044	0.000704	0.00176
17	0.000616	0.001847	0.001934
18	8.78E-05	0.000263	0.000351
19	0.000263	0.000351	0.000439
20	0.000789	0.002982	0.004385
21	0.000789	0.001753	0.003067
22	8.76E-05	8.76E-05	0.000701
23	0.000175	0.000963	0.002276
24	0.000263	0.0007	0.002626
25	8.75E-05	8.75E-05	0.000437
26	0.000699	0.000175	0.001136
27	0.000699	0.000786	0.001485
28	0.000349	0.001135	0.002794
29	0.000175	0.001921	0.001833
30	0.000261	0.000609	0.000609
31	0	8.68E-05	0.000955
32	0	0.000174	0.000694
33	0.00026	0.000173	0.001387
34	0.00078	0.001126	0.003293
35	0.000779	0.001299	0.001299
36	0.00026	0.000433	0.000865
37	0.000346	0.000519	0.001385
38	0.001037	0.00095	0.000778
39	0.000778	0.000691	0.001382
40	0.001555	0.002246	0.004147
41	0.000345	0.000518	0.001036
42	0.001123	0.0019	0.003541
43	0.000345	0.000777	0.001208
44	0.001121	0.000776	0.002501
45	8.61E-05	0.000344	0.001119
46	0.000602	0.001118	0.001204
47	0.00043	0.001203	0.001289
48	0	0.000258	0.001547

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2	0.000515	0.000601	0.000687
3	0.000344	0.000687	0.002147
4	0	8.59E-05	0.000773
5	0	0.000343	0.000601
6	8.58E-05	0.001201	0.001973
7	0.000257	0.000857	0.002572
8	8.56E-05	0.000171	0.000941
9	0.000342	8.54E-05	0.000427
10	0.000426	0.001704	0.002216
11	0.000256	0.000426	0.001363
12	0.001448	0.001874	0.003577
13	0.001107	0.001873	0.002725
14	0.001192	0.002128	0.003575
15	0.000851	0.000425	0.001191
16	0.000766	0.001361	0.004764
17	0.000425	0.000764	0.001189
18	8.49E-05	0.001358	0.001104
19	0	0.00017	0.000255
20	8.48E-05	0.000678	0.004579
21	0.00229	0.003222	0.005427
22	0.000424	0.000763	0.002883
23	0.000508	0.000593	0.001101
24	0.000339	0.001016	0.002624
25	0	0.001185	0.002624
26	0.000169	0.000592	0.001353
27	0	0.000507	0.000761
28	0.000845	0.000591	0.001352
29	0.000929	0.001182	0.001689
30	0.000507	0.000338	0.00076
31	0	0.000253	8.43E-05
32	0.000759	0.001096	0.001181
33	0.001095	0.001684	0.003874
34	8.42E-05	0.000168	0.000589
35	8.41E-05	0.00042	0.000336
36	0.001093	0.000756	0.002017
37	0.000671	0.000587	0.000587
38	0.000252	0.000839	0.001174
39	0.000587	0.001341	0.001509
40	0.000503	0.000168	0.00067
41	8.37E-05	0.001005	0.001507
42	0.000418	0.000585	0.001337
43	0.000835	0.001419	0.003005
44	0.001418	0.001418	0.002586
45	0.0005	0.001334	0.001668
46	0.000167	0.0005	0.001334
47	0.000833	0.002083	0.001666
48	0.001332	0.001998	0.003747
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2	0.000416	0.001582	0.00283
3	0.000498	0.000498	0.000748
4	0.000829	0.000994	0.000994
5	0.00058	0.000663	0.001326
6	0.00058	0.00149	0.001076
7	0.001076	0.001407	0.003808
8	0.000414	0.000828	0.000579
9	0.000662	0.001075	0.002564
10	0.000909	0.000578	0.001487
11	8.26E-05	0.000248	0.000496
12	0	8.24E-05	0.000412
13	0.000988	0.00107	0.002387
14	0.000988	0.000658	0.00107
15	0.000329	0.001481	0.003043
16	0.000411	0.000575	0.001808
17	0.000164	0.000411	0.001479
18	0.000739	0.001478	0.002053
19	8.2E-05	0.000246	0.001148
20	0.000492	0.001394	0.003362
21	0.000736	0.000327	0.001064
22	0.001552	0.002368	0.00441
23	0	0.00049	0.001061
24	0.000815	0.000897	0.001712
25	0.000813	0.000325	0.001464
26	0.000163	0.00065	0.001463
27	0.000813	0.001219	0.001869
28	0	0.000162	0.000406
29	8.11E-05	8.11E-05	0.000487
30	0.001781	0.0017	0.003482
31	0.00105	0.002101	0.002101
32	0	0.000565	0.000889
33	0.000323	0.000806	0.001371
34	0.000484	0.000967	0.001209
35	0.000242	0.000805	0.000725
36	0.000724	0.001449	0.001931
37	8.04E-05	0.000482	0.000884
38	0.000643	0.001205	0.002572
39	0.000481	0.002006	0.001204
40	0.000401	0.001603	0.003847
41	0.001201	0.000801	0.001681
42	0.00064	0.001841	0.002882
43	0.0004	0.00024	0.00064
44	0.00064	0.001999	0.001839
45	0.000799	0.00048	0.000879
46	0.000559	0.001278	0.001758
47	0.000399	0.001278	0.001837
48	0.00016	7.98E-05	0.000718
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2	0.000638	0.000798	0.002314
3	0.000558	0.000638	0.002233
4	0.000239	0.001036	0.002071
5	0.000398	0.000717	0.001195
6	0.000159	0.000637	0.001592
7	0.000715	0.000636	0.002383
8	0.000635	0.000556	0.00135
9	0.000556	0.000635	0.00127
10	0.000159	0.000238	0.000794
11	0.000714	0.000635	0.001349
12	0	7.93E-05	0.000159
13	0.000158	0.000396	0.001109
14	0.000475	0.000554	0.001108
15	0.000396	0.001978	0.002374
16	0.000158	7.91E-05	0.000949
17	0.000712	0.000949	0.002214
18	0.00079	0.000395	0.000869
19	7.88E-05	0.000394	0.000788
20	0.00063	0.001732	0.002519
21	0.000236	0.000865	0.001101
22	0.000943	0.001415	0.003773
23	7.85E-05	0.000706	0.001884
24	0	0.000157	0.000863
25	0.000314	0.000392	0.000706
26	0.000863	0.000549	0.002117
27	0	0.000235	0.000549
28	0.000235	0.00047	0.000705
29	0.000548	0.000782	0.000939
30	7.82E-05	0.000156	7.82E-05
31	0	7.82E-05	0.000391
32	0.000234	0.002186	0.003826
33	0.000625	0.000156	0.000312
34	0	0.000546	0.000468
35	0.001014	0.000468	0.001248
36	0.000156	0.001247	0.001871
37	0.000312	0.000779	0.001792
38	0.000701	0.000545	0.000701
39	0.000234	0.000934	0.000856
40	0.000622	7.78E-05	0.000233
41	0.000544	0.001866	0.003422
42	0.000155	0.000544	0.002875
43	0.000155	0.000544	0.000466
44	0.000311	0.000621	0.000854
45	0.000699	0.000544	0.000932
46	0.000698	0.000854	0.001397
47	7.76E-05	0.000388	0.000621
48	0.000388	0.000931	0.001784
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2	0	7.75E-05	0.000465
3	7.75E-05	0.000465	0.00062
4	0.00093	0.00093	0.001704
5	7.74E-05	0.000697	0.001548
6	0.000155	0.000929	0.001702
7	0.000464	0.000309	0.000774
8	0.00085	0.000773	0.00201
9	0.000541	0.000773	0.003168
10	0.001003	0.00054	0.001389
11	0.00162	0.00216	0.003318
12	7.71E-05	0.000308	0.002544
13	0.000154	0.000385	0.001156
14	0.000385	0.000308	0.000925
15	0.000154	0.000385	0.001463
16	7.68E-05	0.000461	0.000384
17	0.000307	0.000307	0.001151
18	0.000307	0.002072	0.001765
19	0.00046	0.001151	0.001611
20	0.001073	0.001992	0.002835
21	0	0.001072	0.001532
22	0.001531	0.003138	0.00574
23	0.000994	0.000382	0.001146
24	0.000534	0.000534	0.001374
25	0.000381	0.000992	0.00122
26	0.000534	0.000915	0.00221
27	0.000533	0.000838	0.001219
28	0.000837	0.001293	0.00213
29	7.6E-05	0.000304	0.002356
30	0.000228	0.000152	0.000684
31	0.000683	0.000456	0.000835
32	7.59E-05	0.001367	0.000835
33	7.59E-05	7.59E-05	0.000532
34	0.000227	0.000986	0.001971
35	0.001287	0.002044	0.003635
36	0.000453	0.000755	0.001283
37	7.54E-05	0.000226	0.001658
38	0.000377	0.001883	0.001356
39	0	0.000301	0.000902
40	0.000225	0.001052	0.001954
41	0.000676	0.000601	0.000977
42	0.000902	0.000902	0.002254
43	0.000225	0.000225	0.000601
44	0.0003	0.001051	0.002102
45	0.000375	0.000601	0.001126
46	7.49E-05	0.000375	0.0006
47	0.000524	0.000599	0.000749
48	0.000598	0.002843	0.00187
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2	0.000224	0.001271	0.002617
3	0.001344	0.001643	0.004407
4	0.000821	0.001195	0.00224
5	0.000224	0.001344	0.00209
6	0.000448	0.000373	0.000746
7	0.000149	0.000671	0.001863
8	0.000298	0.00149	0.002682
9	0.00067	0.000968	0.003276
10	0.001712	0.003201	0.004019
11	0.000297	0.000817	0.001411
12	0.000668	0.001039	0.001262
13	0.000594	0.001707	0.001929
14	0.000445	0.000815	0.002075
15	0.000445	0.000148	0.000296
16	7.41E-05	0.000148	0.000815
17	0.00037	0.000592	0.001481
18	0.000444	0.000592	0.00074
19	0.000444	0.000665	0.001331
20	0.000222	7.39E-05	0.000444
21	0.000148	0	7.38E-05
22	0.000368	0.001326	0.000737
23	0.000368	0.000737	0.00221
24	0.000368	0.001544	0.002058
25	0.000661	0.001763	0.002791
26	0.000513	0.00044	0.000733
27	0	0.000147	0.000733
28	0.000293	0.000513	0.001173
29	0.00022	0.000293	0.001099
30	0.000586	0.000805	0.001757
31	0.000146	0.000293	0.000659
32	0.001244	0.000951	0.001756
33	0.000512	0.000878	0.001243
34	0.000146	0.000438	0.001754
35	0.000292	0.001241	0.00365
36	7.3E-05	0.000949	0.001313
37	0.000292	0	7.3E-05
38	0.000146	0	0.000656
39	0.000291	0.000655	0.003059
40	0.000582	0.001747	0.002257
41	0.000291	0.000364	0.000873
42	0.000728	0.001747	0.003857
43	0.000218	0.000728	0.001528
44	0.000364	0.000582	0.001383
45	0.000364	0.000728	0.001019
46	7.27E-05	0.000291	0.000509
47	0.000145	0.00029	0.000508
48	0.000508	0.000363	0.000508
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2	0.00029	0.000869	0.001087
3	0.000651	0.000506	0.001085
4	0.000506	0.000795	0.002964
5	0.001012	0.000795	0.001446
6			
7	0.00065	0.000939	0.002455
8	0.000433	0.000722	0.001732
9	0	0.000721	0.001515
10	0.000144	0.000289	0.000361
11	0.000289	0.001443	0.001803
12			
13	0.000144	0.000288	0.000288
14	0.000216	0.001153	0.001874
15	0.00036	0.001152	0.001296
16	0.000864	0.001152	0.001584
17	0.000216	0.000647	0.000935
18	0.000789	0.000574	0.001866
19			
20	0	0.000215	0.000359
21	0.000573	0.00258	0.003225
22	0.000645	0.00129	0.002222
23			
24	0.00043	0.000859	0.003866
25	0.000428	0.001785	0.004783
26	0.000143	0.000214	0.000428
27	0.000285	0.000856	0.00107
28	7.13E-05	7.13E-05	0.000357
29			
30	0.000214	0.001283	0.002353
31	0.000784	0.000214	0.000285
32	0.000427	0.001496	0.001211
33	0.00114	0.001211	0.002209
34	0.000285	0.001068	0.001994
35			
36	0.000214	0.000641	0.001211
37	7.12E-05	0.000356	0.000996
38	0.000426	0.000426	0.001207
39	0.000567	0.000922	0.001206
40			
41	7.09E-05	0.000354	0.00156
42	0.000496	0.000425	0.002906
43	0.000212	0.000496	0.000566
44	0	0.001133	0.00092
45	0.000212	0.000637	0.002832
46			
47	0.000708	0.001557	0.003751
48	0.000778	0.000778	0.002051
49	0.000495	0.001272	0.002686
50	7.06E-05	0.000706	0.001765
51	0.000565	0.0012	0.002117
52			
53	0	0.000141	0.000212
54	0.000211	0.001057	0.001973
55	0.000282	0.000987	0.00155
56	0.001832	0.002114	0.002889
57	0.000282	0.000282	0.001197
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2	0.001196	0.000704	0.002322
3	0.000352	0.000492	0.000703
4	0.000211	0.00014	0.001263
5	0.000842	0.002105	0.001965
6	0.00014	0.000351	0.000631
7	0.00035	0.00028	0.001752
8	0.00056	0.00091	0.00147
9	7E-05	0.00056	0.001679
10	0	0.00028	0.0007
11	0.000979	0.001749	0.004197
12	0.000559	0.000909	0.001888
13	0.00014	0.00021	0.00021
14	0.000838	0.000838	0.001817
15	0.00014	0.000768	0.002375
16	0.000279	0.000558	0.001047
17	0.00014	0.000977	0.002442
18	0.000209	0.000418	0.000906
19	0	0.000418	0.000906
20	0.000279	0.000557	0.000975
21	6.96E-05	0.000348	0.000627
22	0.000139	0.000557	0.000835
23	6.96E-05	0.000974	0.002226
24	0.001042	0.001807	0.003474
25	0.000695	0.000903	0.001667
26	0.000416	0.000694	0.001249
27	0.000415	0.000967	0.001866
28	6.91E-05	0.000276	0.000691
29	0.000276	0.000276	0.000828
30	0.000345	0.00069	0.000759
31	0.000276	0.000207	0.00069
32	0.000621	0.001104	0.002276
33	0.000483	0.00138	0.003518
34	0.002412	0.002067	0.004823
35	0.000138	0.000138	0.000344
36	0.000482	0.000482	0.001515
37	0.000275	0.000413	0.000895
38	0.000275	0.001238	0.001445
39	6.88E-05	0.001101	0.001238
40	0.000137	0	0.000412
41	0.000961	0.000961	0.001716
42	0.000274	0.000754	0.001235
43	0.000274	0.000685	0.003496
44	0.000274	0.001095	0.001575
45	0.000411	0.000684	0.000684
46	0.000615	0.000889	0.002462
47	0.000889	0.001504	0.003213
48	0.000615	0.000342	0.000957
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2	6.83E-05	0.001229	0.001775
3	0.000546	0.001297	0.002526
4	0.000546	0.000819	0.001501
5	0.000409	0.000546	0.001501
6	0.000136	0.000205	0.000545
7	0.000136	0.000818	0.001159
8	6.81E-05	0.000204	0.000408
9	0.000136	0.000272	0.000204
10	0	0.000544	0.001088
11	0.000544	0.000544	0.000884
12	0.000271	0.000136	0.000407
13	6.77E-05	0.000745	0.000677
14	0.000745	0.000474	0.001422
15	0.000203	0.000203	0.000541
16	0.000202	0.000675	0.001215
17	0.000135	0.000202	0.000337
18	0.00054	0.00027	0.000877
19	0.000405	0.001215	0.002227
20	0.000472	0.000877	0.001012
21	0.000472	0.001484	0.001281
22	0.001213	0.002022	0.002831
23	0.000538	0.001412	0.002823
24	0	0.00047	0.000739
25	0.000268	0.000335	0.000805
26	0	0.000134	0.00047
27	0.000134	0.001677	0.002348
28	6.71E-05	0.000403	0.000872
29	6.7E-05	0.000134	0.000335
30	0.000134	0.000602	0.001004
31	0.00107	0.001739	0.003345
32	0.000468	0.001405	0.001538
33	0.000401	0.000735	0.000602
34	6.68E-05	0.000401	0.000468
35	0.0002	0.001069	0.00167
36	0.000267	0.000601	0.001202
37	6.67E-05	0.000534	0.000801
38	0.0004	0.000133	0.001068
39	0	0.000334	0.001868
40	0.000133	0.000533	0.000733
41	0.0006	0.000467	0.0004
42	0.000667	0.0008	0.001133
43	0	0.000466	0.000931
44	6.64E-05	0.000199	0.000531
45	0	0.001793	0.001461
46	0.000663	0.001391	0.002187
47	0	0.000397	0.000993
48	0.000198	0.000396	0.001387
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2	0.001056	0.001452	0.003168
3	0.00033	0.00066	0.001583
4	0.001055	0.002243	0.002968
5	0.001253	0.001253	0.001715
6	0.000527	0.000264	0.001384
7	0.000329	0.000329	0.000527
8	0.000197	0.000132	0.000395
9	0	6.58E-05	0.000986
10	6.57E-05	0.000329	0.00092
11	0.000526	0.000986	0.001577
12	0.000131	0.000657	0.00105
13	0	0.000131	0.000722
14	0.000262	0.000197	0.000459
15	0.001966	0.001573	0.003342
16	0.000393	0.000917	0.001769
17	0.000262	0.001048	0.002161
18	0.000588	0.000458	0.000588
19	0.000327	0.001046	0.001504
20	0.000261	0.000457	0.000849
21	0.000196	0.000196	0.000978
22	0.00026	0.00039	0.001106
23	0.00039	0.000585	0.001105
24	0.001232	0.000519	0.001751
25	6.48E-05	0.000324	0.000907
26	0.000842	0.00123	0.003431
27	0.001034	0.001745	0.00265
28	0.000194	0.00071	0.001614
29	0.000774	0.001613	0.002387
30	6.44E-05	0.00058	0.001159
31	0.000451	0.000644	0.001352
32	0.000129	0.000322	0.000322
33	0.000321	0.000643	0.001029
34	0	0.000129	0.000707
35	0.000576	0.000192	0.001152
36	0.000256	0.000512	0.000576
37	0.000896	0.000512	0.001536
38	0.001279	0.001023	0.001983
39	0.000384	0.000511	0.000895
40	0.000128	0.000383	0.001278
41	0.000703	0.001022	0.00281
42	0.001149	0.000894	0.001916
43	0.000319	0.000127	0.000956
44	0.000255	6.37E-05	0.00051
45	0.000255	0.000382	0.00051
46	0.000127	0.000636	0.001782
47	0	0.000572	0.000763
48	0.00089	0.001334	0.003749
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2	0.000635	0.000191	0.000762
3	0	0.000254	0.000888
4	0.000444	0.001332	0.002474
5	0	0.000127	0
6	0.000127	0.000634	0.000634
7	0.00038	0.000507	0.001902
8	0.00076	0.00114	0.00076
9	0.00019	0.000316	0.000696
10	0.00057	0.000506	0.001899
11	0.001137	0.000821	0.001516
12	0.000126	0.000379	0.001451
13	0.000252	0.000378	0.001072
14	6.3E-05	6.3E-05	0.000504
15	0	0.000126	0.000567
16	0.000503	0.000315	0.001195
17	0.000503	0.001006	0.001635
18	0.000251	0.000503	0.000754
19	0	0.000251	0.000628
20	0.000126	0.000565	0.002008
21	0.000188	0.000125	0.000313
22	0.001002	0.001252	0.001378
23	6.26E-05	0.000376	0.001377
24	6.25E-05	0.000125	0.000188
25	0.000625	0.000437	0.000625
26	0.001187	0.001499	0.003499
27	6.25E-05	0.00025	0.001874
28	0.000375	0.000375	0.0005
29	0	0.000312	0.001686
30	0.000874	0.000687	0.001311
31	6.24E-05	0.000312	0.000686
32	0	0.000249	0.000747
33	0.000187	0.000249	0.000373
34	0.000498	0.000311	0.001369
35	0.000497	0.000311	0.001057
36	0.000373	0.000869	0.001801
37	0.000868	0.00062	0.002171
38	0.000124	0.000372	0.002109
39	0.000248	0.000372	0.001116
40	0.000248	0.000744	0.00093
41	0	0	0.000372
42	0.000124	0.000433	0.001175
43	0.000989	0.00068	0.001299
44	0.000804	0.000371	0.001361
45	0.000742	0.001175	0.00303
46	0.000371	0.000494	0.000741
47	0.000309	0.000185	0.000124
48	0.000247	0.000494	0.000432
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2	0.000247	0.000185	0.00074
3	0.000431	0.000246	0.000678
4	0.000616	0.00117	0.002772
5	0.000678	0.001478	0.002464
6	0.00043	0.000553	0.001107
7	0.000369	0.00043	0.000614
8	0.000246	0.000676	0.000799
9	0.001227	0.001289	0.002761
10	0.000184	0.000184	0.001103
11	0.000429	0.000551	0.002083
12	0.000183	0.000489	0.001344
13	0.000244	0.000183	6.1E-05
14	0.000793	0.000854	0.001585
15	6.1E-05	6.1E-05	0.000183
16	0.00067	0.001035	0.003349
17	0.000548	0.000548	0.00146
18	0.000121	0.000121	0.000304
19	0.000727	0.000727	0.001455
20	0.000424	0.000545	0.000908
21	0	0.000483	0.000483
22	0.000544	0.000242	0.001208
23	0.000845	0.000664	0.001569
24	0.000362	0.000362	0.000965
25	0.000844	0.001145	0.002411
26	0.000301	0.000904	0.000542
27	0.000301	0.000421	0.000963
28	0.001203	0.001203	0.002527
29	0.000481	0.000782	0.002165
30	0.00012	0.000661	0.000962
31	0.00036	0.000781	0.001381
32	0.00048	0.00036	0.001141
33	0.00012	0.0006	0.00108
34	0.000359	0.000299	0.00012
35	0.000239	0.000718	0.001196
36	0.000299	0.000299	0.001017
37	0.000298	0.000716	0.001253
38	0.000477	0.000537	0.001073
39	0.000536	0.000834	0.001788
40	0.000119	0.001606	0.002737
41	0.000178	0.000595	0.001428
42	0.000178	5.95E-05	0.000119
43	0.000237	0.000237	0.00089
44	0.000119	0.000712	0.000712
45	0.000296	0.000534	0.000356
46	0.000415	0.000415	0.001126
47	0.000178	0.000237	0.000593
48	0.000414	0.002191	0.00148
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2	5.92E-05	0.000414	0.000473
3	0.000177	5.91E-05	0.000532
4	5.91E-05	0	0.000296
5	5.91E-05	0.000236	0.001122
6	0.000295	0.000886	0.001712
7	0.000886	0.001417	0.001358
8	0.000354	0.000236	0.000649
9	5.89E-05	0.000472	0.001356
10	0.000766	0.000589	0.001592
11	0.000118	0.000353	0.00106
12	0.000118	0.000529	0.001353
13	0	0.000118	0.000353
14	0.000823	0.000647	0.001646
15	5.87E-05	0.000117	0.000528
16	0.000117	0.000176	0.000586
17	0.00041	0.00211	0.001231
18	0.000176	0.000234	0.000469
19	5.86E-05	0.000469	0.000937
20	0.000351	0.000878	0.000644
21	5.85E-05	0.000351	0.000878
22	0	0.000351	0
23	0.000526	0.000292	0.001286
24	0.00076	0.000701	0.000818
25	0.000292	0.000584	0.001635
26	0.000525	0.000409	0.000759
27	0.000175	0.000642	0.002043
28	0.000117	0.00035	0.000175
29	0.000233	0.000233	0.000466
30	0	0.000407	0.000524
31	5.82E-05	0.000291	0.001047
32	0.000638	0.00087	0.002205
33	5.8E-05	0.000638	0.001799
34	0.000695	0.000405	0.000926
35	0	0.000347	0.000695
36	0.000231	0.000405	0.001099
37	0.000231	0.000578	0.002718
38	0.00052	0.000694	0.000925
39	0.000867	0.001618	0.003641
40	0.000347	0.000173	0.000635
41	0.000693	0.001097	0.002194
42	5.76E-05	0.000115	0.000576
43	0.000806	0.000806	0.00144
44	0.000576	0.000921	0.000576
45	0.000575	0.001035	0.001553
46	0.000345	0.001092	0.000862
47	0.000632	0.000689	0.000517
48	0	0.000632	0.000804
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2	0.000401	0.000631	0.001548
3	0.000859	0.000229	0.000859
4	0.000344	0.000401	0.00126
5	0	5.72E-05	0.000515
6	0	0.000572	0.001258
7	5.72E-05	5.72E-05	0.000343
8	0.000229	0.000572	0.000915
9	0.000628	0.001028	0.001543
10	0.000457	0.000742	0.001598
11	0.000856	0.002054	0.002967
12	5.7E-05	0.000114	0.000285
13	5.7E-05	0.000285	0.001197
14	0.000171	0.000399	0.00131
15	0.000228	0.000114	0.001139
16	0.000569	0.000341	0.001252
17	0.000228	0.000512	0.000853
18	0.000171	0.000341	0.000625
19	0.000227	0.001931	0.002385
20	0.000568	0.000681	0.004143
21	0	5.67E-05	0.00085
22	0.00153	0.001756	0.003512
23	0.000226	0.000283	0.000679
24	0.000226	0.00017	0.000396
25	0.000283	0.000622	0.000791
26	0.000678	0.000622	0.001413
27	0.000791	0.003501	0.003953
28	0.000339	0.000621	0.001242
29	5.65E-05	0.000734	0.001355
30	0.000169	0.000113	0.000507
31	0.00062	0.000846	0.001692
32	0.000169	0.000338	0.000902
33	5.64E-05	5.64E-05	0.000169
34	0.000113	0.00045	0.001689
35	0.000112	0.000225	0.000112
36	0.000337	0.000281	0.000393
37	5.6E-05	0.001007	0.000616
38	5.6E-05	5.6E-05	0.000392
39	0.00028	0.000224	0.00123
40	0.000224	5.59E-05	0.000447
41	5.59E-05	0.000112	0.000279
42	0.000112	0.000503	0.000782
43	0.000112	0	0.000502
44	0	0.00039	0.000781
45	0.00039	0.000335	0.000167
46	0.000167	0.000278	0.000334
47	0.000334	0.001001	0.001613
48	0.000612	0.000389	0.001502
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2	0.000778	0.001612	0.001556
3	0.000167	0.000944	0.001277
4	0.000389	0.000222	0.000333
5	0.000498	0.000664	0.00177
6	0.000497	0.002155	0.004366
7	0.000497	0.000442	0.001767
8	0.000442	0.000442	0.001325
9	0	0.000165	0.00011
10	0.000716	0.000716	0.001927
11	0.001046	0.001431	0.003137
12	0.00044	0.001541	0.002091
13	5.5E-05	0.00033	0.00077
14	5.5E-05	0.000165	0.000275
15	0.0011	0.001429	0.004398
16	0.00022	0.000385	0.001044
17	0.00011	0.000329	0.000768
18	0.00022	0.00022	0.000549
19	0.000384	0.000219	0.001261
20	0.000548	0.000438	0.001096
21	0.000548	0.001205	0.001972
22	0.000273	0.000492	0.001694
23	0.000382	0.000929	0.001147
24	0.001091	0.0006	0.002019
25	0	0.000327	0.000273
26	0	0.000273	0.001472
27	0.00049	0.000599	0.001362
28	0.000163	0.000218	0.000163
29	0.000109	0.000435	0.000489
30	0.000651	0.000705	0.001628
31	0.000597	0.000759	0.001085
32	0.000325	0.000922	0.001627
33	0.000488	0.000705	0.001572
34	0.000325	0.000651	0.001084
35	5.41E-05	0.000108	0.000757
36	0.000486	0.000702	0.001351
37	5.4E-05	0.000378	0.000756
38	0.000432	0.00054	0.001134
39	0.000324	0.000864	0.001242
40	0.000216	0.00054	0.000324
41	0.000108	0	0.000486
42	0.000162	0.000216	0.000377
43	0.000215	0.000161	0.000754
44	0	0.000215	0.000377
45	5.38E-05	0.000161	0.000376
46	0.001502	0.001019	0.003272
47	0.000429	0.001233	0.002252
48	0.000161	0.000482	0.001501
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2	0	5.36E-05	0.000482
3	0.000428	0.000641	0.000267
4	0.000374	0.001122	0.00155
5	0.000961	0.001763	0.00438
6	0.000213	0.000799	0.001172
7	0.000107	0.000213	0.001172
8	0.000213	0.000426	0.001172
9	0	0.000585	0.001171
10	0.000585	0.000851	0.001543
11	0	0.000266	0.000266
12	0.000425	0.000532	0.000851
13	0	0.000106	0.000638
14	5.3E-05	0.000159	0.00053
15	0.000848	0.000636	0.001431
16	0.000106	0.000264	0.000317
17	0.000264	0.000634	0.002061
18	0	0.000211	0.000739
19	0.000369	0.000633	0.00058
20	0.000369	0.000211	0.000264
21	0.000738	0.000475	0.001213
22	0.000632	0.000105	0.000211
23	0.000526	0.001	0.000684
24	0	0.000684	0.000631
25	0.000105	0.000315	0.001206
26	5.24E-05	0.000157	0.000419
27	0.000576	0.00131	0.001048
28	0.000157	0.000681	0.000943
29	5.23E-05	0.000366	0.002094
30	0.000837	0.000366	0.00157
31	0.000262	0.000419	0.001361
32	0.000418	0.000731	0.00162
33	0.000261	0.000366	0.000783
34	0.000209	0.000313	0.000574
35	0.000418	0.000365	0.001044
36	0.000522	0.000261	0.000156
37	0.000626	0.000469	0.001512
38	0.000573	0.001042	0.001094
39	0.000104	0.00026	0.000208
40	0.000572	0.000572	0.001041
41	0.000208	5.2E-05	0.00026
42	0	0	0
43	0.00026	0.000675	0.001195
44	0.000104	0.000571	0.001141
45	0.000156	0	0.000518
46	0.000311	0.00057	0.000933
47	0.000207	0.000259	0.000207
48	0.000362	0.00119	0.001449
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2	0.000621	0.000414	0.001345
3	0	0	0
4	5.16E-05	0.000258	0.001704
5	0.000361	0.000929	0.001755
6	0.000206	0.000206	0.00031
7	0.000103	5.15E-05	0.000258
8	0	0.000206	0.000257
9	5.15E-05	0.00036	0.000669
10	0.000206	0.000103	0.000412
11	0.000103	0.000515	0.000978
12	0.000412	0.000823	0.001749
13	0.00036	0.000463	0.000566
14	0.000154	0.000617	0.000874
15	5.14E-05	0.000308	0.000206
16	0.000103	0.001283	0.00077
17	0.000103	0.000103	0.000154
18	0	0	0.000154
19	0.000205	0.000205	0.000358
20	0	5.12E-05	0.00046
21	0.000204	0.000204	0.000409
22	0.000102	0.000102	0.000765
23	0.000102	0.000407	0.000204
24	0.000661	0.000661	0.000967
25	0.000254	0.000763	0.002697
26	0.000102	0.000509	0.000763
27	0.000254	0.000254	0.000508
28	0.000304	0.00071	0.001015
29	0.000203	0.000406	0.000304
30	0.000203	0.000659	0.000964
31	5.06E-05	0.000152	0.000506
32	5.06E-05	0.000152	0.000657
33	0.000455	0.000303	0.000455
34	5.05E-05	0.000404	0.000505
35	0.000252	0.000101	0.000403
36	5.04E-05	0.000302	0.000353
37	0.000554	0.001611	0.002266
38	0.000553	0.000604	0.000956
39	0.000352	0.000453	0.00176
40	0	0.000151	0.000603
41	0.000553	0.000653	0.001206
42	5.03E-05	0.000151	0.001005
43	0.000352	0.000251	0.001507
44	0.000301	0.001054	0.001355
45	0.000452	0.000903	0.001656
46	0.000301	0.0001	0.000501
47	0.000301	0.00015	0.000501
48	0.000601	0.000702	0.001053
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2	0.000351	0.000802	0.000952
3	0.001101	0.001902	0.002403
4	0.0004	0.000801	0.000701
5	0.0002	0.00025	0.0005
6	0.00035	0.000851	0.001801
7	5E-05	0.00015	0.00035
8	0.00025	0.000599	0.000749
9	0	4.99E-05	0.000499
10	0	0	0.000849
11	0.00025	0.00015	0.000449
12	0.000449	9.97E-05	0.000698
13	0.000199	0.000399	0.000448
14	0.000896	0.000945	0.001194
15	0	4.97E-05	0.000249
16	0.000199	0.000397	0.000646
17	0.000595	0.000546	0.001042
18	0.000446	0.000595	0.000744
19	0.000248	0.000396	0.001139
20	0.000445	0.001136	0.002915
21	0.000346	0.000889	0.000988
22	0.000345	0.000542	0.002219
23	0.000345	0.000788	0.001182
24	0.000148	0.000689	0.000985
25	0.000246	0.000344	0.000737
26	9.83E-05	4.91E-05	0.000246
27	0.000246	9.83E-05	0.000197
28	0.000884	0.000737	0.001326
29	0.000441	0.000343	0.001765
30	0.000245	0.001127	0.001421
31	0.000979	0.000587	0.000783
32	0	9.79E-05	0.000147
33	0.000538	0.000342	0.001613
34	0.000342	0.000733	0.001075
35	4.88E-05	0.000439	0.00083
36	0.000195	0.000488	0.001366
37	0.000195	0.000585	0.001073
38	0	0	0.000389
39	0.000243	0.000243	0.000437
40	0.000194	0.000678	0.000727
41	0.000339	0.000339	0.001162
42	0.000387	0.000726	0.001693
43	0.000145	0.000241	0.000289
44	4.82E-05	9.64E-05	0.000482
45	0	0	0.000867
46	4.81E-05	0.000577	0.000625
47	0.000529	0.000577	0.001443
48	0.000288	0.000865	0.000625
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2	0.000192	0.001582	0.002973
3	0.000431	0.000478	0.00067
4	0.00043	0.00043	0.000717
5	0.000143	0.000143	0.00086
6	0	0.000143	0.000334
7	0.000239	0.000191	0.001002
8	0.000238	4.75E-05	0.000238
9	0	9.5E-05	0.001188
10	0.000143	0.00057	0.00095
11	0.000142	0.000332	9.5E-05
12	0.000142	0.000427	0.000807
13	0.000237	0.000427	0.001044
14	0.00038	0.000617	0.001329
15	0.00019	0.000474	0.000806
16	0.000427	0.000617	0.001613
17	0.00019	0.000569	0.001233
18	0.000616	0.0009	0.001232
19	0.00019	0.000284	0.000521
20	0.000521	0.000331	0.00071
21	0.000521	0.000663	0.000852
22	9.46E-05	0.000237	0.000899
23	0.000189	0.000189	0.000331
24	0.000142	9.46E-05	0.000189
25	0.000331	0.000614	0.000992
26	0.000614	0.000803	0.001275
27	0.000566	0.001273	0.001603
28	0.000189	9.43E-05	0.000754
29	0.000424	0.000377	0.001084
30	9.42E-05	0.000377	0.000518
31	0.000282	0.000988	0.001223
32	9.4E-05	0.000376	0.000658
33	0.000422	0.000141	0.000329
34	0.000141	0.000328	0.000375
35	0	0.000561	0.000514
36	4.67E-05	0.000234	0.000421
37	0.000234	0.000514	0.001261
38	0.000233	0.000419	0.002003
39	0.000186	0.00014	0.000512
40	0.000186	0.000419	0.000837
41	9.3E-05	0.000233	0.001116
42	0.000651	0.000697	0.002045
43	4.65E-05	0.000325	0.001348
44	0	0	0.000139
45	0.000186	0.000186	0.000835
46	0.000278	4.63E-05	0.000649
47	0	0.000231	0.000509
48	0.000462	0.000693	0.001063
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2	0.000138	0.000369	0.000415
3	0.000276	0.00023	0.000598
4	4.6E-05	0.00023	0.00069
5	0.000184	0.000276	0.00046
6	0.000184	0.000138	0.000643
7	9.18E-05	0.000138	0.000275
8	0.000413	0.000551	0.00078
9	0.000183	0.000412	0.000916
10	0.000229	0.00055	0.00055
11	0.000274	0.000914	0.001143
12	0.000548	0.000502	0.000867
13	9.12E-05	0.00041	0.000502
14	0.00041	0.000137	0.000319
15	0.000137	0.000547	0.000547
16	0.000136	0.000136	0.000318
17	0.000318	0.000862	0.000907
18	0	0.000181	0.00068
19	9.07E-05	0.00068	0.00068
20	4.53E-05	0.000136	0.000589
21	0.000498	0.000815	0.001222
22	0	0.000272	0.001222
23	0.000271	0.000452	0.000588
24	0.000361	0.000452	0.001129
25	0.001038	0.000948	0.001669
26	0.000812	0.000541	0.000947
27	4.51E-05	0.000901	0.001307
28	0.000315	0.00027	0.000631
29	0.000225	0.00027	0.00054
30	9E-05	0.000315	0.001035
31	0.000135	0.000135	0.000629
32	8.99E-05	0.000225	0.000674
33	0.00027	0.000764	0.000944
34	0.000269	0.000673	0.001659
35	0.000179	0.000269	0.000583
36	0.000134	0.000179	0.000538
37	0	4.47E-05	0.000358
38	0.000491	0.000759	0.001608
39	0	8.93E-05	0.000402
40	0.000179	0.00067	0.001027
41	0.000446	0.000713	0.001293
42	0	8.9E-05	4.45E-05
43	0.000178	8.89E-05	0.000356
44	0.000178	0.000444	0.001022
45	0.000578	0.000267	0.000533
46	0.000178	0.000222	0.000933
47	0.000133	4.43E-05	0.000222
48	0.001329	0.001816	0.002303
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2	0.00031	0.000266	0.00031
3	0.000221	0.000841	0.000797
4	0.000221	0.000664	0.001815
5	0	8.85E-05	0.000443
6	0.000885	0.000752	0.001416
7	0.000531	0.000398	0.001725
8	4.42E-05	8.85E-05	0.000354
9	0.000486	0.000575	0.000972
10	0	0.000662	0.000309
11	0.000352	0.000617	0.001013
12	0.000352	0.000484	0.000748
13	0.000395	0.000483	0.000659
14	4.39E-05	0.000263	0.000439
15	8.77E-05	0.000482	0.000877
16	8.77E-05	0.00114	0.001622
17	4.38E-05	0.000175	8.76E-05
18	4.38E-05	0.000219	0.000481
19	0.000437	0.000394	0.001268
20	0.000131	8.73E-05	0.000349
21	0.000131	0.000262	0.00061
22	0.000349	4.36E-05	0.000218
23	8.72E-05	0.000131	0.000741
24	4.35E-05	0.000174	0.000392
25	0.001087	0.00087	0.001392
26	0.000652	0.000999	0.001868
27	0.00013	0.000261	0.000782
28	0.000217	0.000173	0.00039
29	0.000303	0.000563	0.000693
30	4.33E-05	0.00026	0.000303
31	0.000216	0.000606	0.000649
32	0.00013	0.000476	0.001558
33	8.64E-05	0.00013	0.000475
34	8.63E-05	0.000475	0.001036
35	0.000259	0.000561	0.001121
36	0.000775	0.000861	0.00142
37	0.000731	0.000559	0.000688
38	0.000215	0.000172	8.6E-05
39	4.3E-05	0.000301	0.000817
40	0.00043	0.000945	0.001289
41	0	0.000129	0.000129
42	0.000172	0.000472	0.000858
43	0.000472	0.000429	0.001372
44	0.000386	0.000429	0.000943
45	0	0.000171	0.000514
46	0.000257	0.0003	0.000814
47	8.57E-05	0.000471	0.000686
48	0.000343	0.000129	0.000514
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2	8.57E-05	4.28E-05	0.000129
3	0.000128	0.000128	0.000171
4	0.000257	0.000771	0.001113
5	8.55E-05	0.000299	0.000342
6	0.000214	0.000128	0.000812
7	0.000769	0.001324	0.001623
8	0.000128	0.000555	0.000683
9	0.000341	0.001194	0.003069
10	0.00017	0.000256	0.000469
11	0.000298	0.00051	0.001234
12	8.5E-05	0.000128	0.000255
13	4.25E-05	0	0.000255
14	0.000212	0.000297	0.000382
15	0.00017	0.000339	0.000679
16	0.000212	0.000509	0.001018
17	0.000296	0.000593	0.001059
18	8.47E-05	0.000339	0.001016
19	4.23E-05	8.46E-05	0.000127
20	0	8.45E-05	8.45E-05
21	4.22E-05	0.000211	0.000295
22	0.000253	0.00038	0.000422
23	0	0.000717	0.001772
24	8.44E-05	4.22E-05	0.000295
25	0.000169	0.000548	0.000548
26	0.000506	0.000421	0.000885
27	0.000168	0.000927	0.000632
28	0.00021	0.000126	0.000631
29	0.000168	4.2E-05	0.000756
30	4.2E-05	8.4E-05	0
31	0.000168	0.000378	0.001134
32	0.00042	0.000756	0.001596
33	0.000294	0.000546	0.000966
34	4.2E-05	0.00021	0.000378
35	0.000503	0.000419	0.000881
36	0.00025	0.000375	0.000793
37	0.000375	0.00025	0.000793
38	0.001122	0.000831	0.000748
39	0.00054	0.000249	0.000872
40	0.000291	0.000374	0.001163
41	0.000166	0.000208	0.000664
42	0.000208	0.000374	0.000581
43	0.000747	0.000747	0.001411
44	0	0.000207	0.000913
45	0.000705	0.000539	0.00112
46	0	8.28E-05	0.000207
47	0.000207	0.000496	0.000662
48	0.000413	0.000496	0.000826
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2	8.26E-05	0.000165	0.000248
3	4.13E-05	4.13E-05	0.000413
4	0.000289	0.000495	0.000867
5	0.000165	0.000908	0.001444
6	0.000247	0.000247	0.000453
7	0.000452	0.001069	0.001768
8	0.000328	0.000205	0.000452
9	0.00041	0.000164	0.000779
10	0	8.2E-05	0.001311
11	0.000246	0.000574	0.001147
12	0.000287	0.000164	0.000369
13	4.1E-05	0.000164	0.001106
14	4.1E-05	0.000819	0.000614
15	8.19E-05	0.000901	0.001146
16	8.19E-05	0.000491	0.000368
17	0.000164	0.000205	0.001432
18	0.000123	0.000286	0.000695
19	0.000409	0.000532	0.001799
20	0.000408	0.000408	0.000816
21	0.001061	0.000857	0.000408
22	0.00049	0.00053	0.000857
23	0.000122	0.000204	0.000612
24	0.00053	0.000774	0.001589
25	4.06E-05	0.000162	0.000447
26	8.11E-05	4.05E-05	0.000365
27	0.000122	0.000446	0.000689
28	0.000364	0.000364	0.000647
29	8.08E-05	0.000323	0.000323
30	0.000283	0.000565	0.000928
31	0.000202	0.000323	0.000524
32	0.000242	0.000121	0.000242
33	4.03E-05	0.000282	0.000242
34	0	8.05E-05	0.000483
35	8.04E-05	0.000241	0.000523
36	0.000442	0.000321	0.000161
37	0.000723	0.001366	0.003615
38	0.000241	0.000241	0.001164
39	0.000321	0.000722	0.000882
40	0.00028	0.0002	0.000922
41	0.00016	4E-05	0.0002
42	0.00024	0.00048	0.00028
43	0.0002	0.0002	0.00024
44	0.00036	0.00016	0.00056
45	7.99E-05	0.00016	0.000519
46	0.00012	0.0002	0.00028
47	0.000279	0.000399	0.000558
48	0.000239	0.000159	0.000558
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2	0.000159	0.000557	0.000637
3	0.000199	7.95E-05	0.000318
4	0.000318	0.000278	0.000397
5	0.000159	0.000357	0.001151
6	0.000238	0.000516	0.000992
7	0.000119	0.000238	0.000238
8	0.000158	0.000711	0.001382
9	0.000197	0.000276	0.000553
10	0.000552	0.000433	0.001221
11	0.000512	0.000354	0.000591
12	3.94E-05	0.000236	0.000197
13	0.000157	0.000904	0.001455
14	0.000433	0.000668	0.001651
15	0.000157	7.86E-05	0.00055
16	0.000236	0.000511	0.00106
17	0.000196	0.000431	0.000626
18	3.91E-05	0.000703	0.000782
19	0	0.000352	0.000117
20	0.000625	0.000625	0.000898
21	0.000117	0.000117	0.000429
22	7.79E-05	0.000117	0.000234
23	0.000428	0.000934	0.002492
24	0	7.77E-05	7.77E-05
25	0.000311	7.77E-05	0.000272
26	0.000232	0.000155	0.000465
27	3.86E-05	0.000425	0.000773
28	0.000193	0.00027	0.000811
29	0.000154	0.000308	0.000615
30	0.000192	0.000346	0.00123
31	0.000192	0.000998	0.000729
32	0.00023	0.000115	0.000575
33	0.000267	0.000382	0.000688
34	0.000267	0.000305	0.000573
35	0	0.000191	0.000305
36	7.62E-05	0.000267	0.000114
37	0.00038	0.000609	0.00137
38	0.00019	0.000228	0.000646
39	0.000266	0.000608	0.000684
40	0.000114	0.00019	0.000228
41	0.000341	0.000948	0.001517
42	0.000569	0.000266	0.000569
43	0.000113	0.000189	0.000529
44	0.000151	0.000378	0.000416
45	3.77E-05	7.55E-05	0.00034
46	0.000113	0.000302	0.000792
47	0.000641	0.000603	0.001169
48	0.000188	0.000301	0.000829
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2	0.000377	0.000452	0.001582
3	0.000339	0.000151	0.000226
4	0.000339	0.000903	0.000941
5	0.00086	0.001048	0.001908
6	0.000599	0.000711	0.001833
7	0.000112	0.00015	0.000187
8	0.000261	0.000448	0.000597
9	7.46E-05	0.000336	0.000634
10	7.45E-05	0.000112	0.000335
11	7.45E-05	0.000186	0.000893
12	0.00026	0.000446	0.000818
13	7.43E-05	0.00026	0.000631
14	3.71E-05	0.000222	0.000705
15	0.000296	0.000111	0.00037
16	3.7E-05	3.7E-05	0.000296
17	0.000444	0.000481	0.00137
18	0.000296	0.000333	0.000962
19	0.000296	0.000148	0.000703
20	0.000148	0.000407	0.000628
21	0.000111	0.000148	0.000665
22	0.000295	0.000517	0.000923
23	0.000221	0.000184	0.0007
24	3.69E-05	0.000147	0.000147
25	0	7.37E-05	0.000553
26	0.000147	0.000553	0.001511
27	0.000221	0.000553	0.000958
28	0.000478	7.35E-05	0.000294
29	0.00011	0.00022	0.000441
30	0.000183	0.000183	0.000256
31	0.001501	0.002271	0.000842
32	0.000696	0.000513	0.001245
33	0.00011	0.000439	0.001062
34	0.000146	0.000366	0.000476
35	0.000439	0.000366	0.000659
36	0.00011	0.000657	0.001205
37	0.000255	0.000219	0.000474
38	0.000292	0.000219	0.000547
39	0.000146	0.000255	0.000401
40	0.000182	0.000473	0.000509
41	0	0.000436	0.000762
42	0.000109	0.000218	0.000508
43	0.00029	0.000689	0.001269
44	0.000507	0.000471	0.001991
45	0.000398	0.000362	0.000326
46	0.000109	0.000253	0.000289
47	3.61E-05	0.000217	0.000217
48	0.000325	0.000253	0.000325
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2	0.000216	0.000397	0.000325
3	0.00036	0.000324	0.000721
4	0	0	0.000108
5	0.000216	0.00054	0.001008
6	0.000504	0.000396	0.001368
7	7.18E-05	0.000431	7.18E-05
8	0.000287	0.000143	0.000538
9	0.000215	0.000179	0.000466
10	0.000143	0.000215	0.00043
11	0	0.000107	0.000394
12	7.16E-05	3.58E-05	0.000394
13	0.000787	0.000394	0.001753
14	3.57E-05	3.57E-05	0.000143
15	7.12E-05	0.000107	0.000178
16	0.000142	0.000391	0.001566
17	0.000249	0.000284	0.000853
18	0.00032	0.000568	0.000817
19	0.000284	0.000284	0.000602
20	0	0.000283	0.000283
21	0	3.54E-05	7.07E-05
22	7.06E-05	0.000141	0.000353
23	0.000282	0.000564	0.000635
24	0.000282	0.000247	0.000529
25	0.000141	0.000141	0.000387
26	0.000246	0.000316	0.000633
27	0.000351	0.000316	0.000948
28	0.000842	0.000772	0.001614
29	0.000175	0.000351	0.000807
30	0.00028	0.00014	0.000105
31	0.000245	0.001016	0.001156
32	0.00042	0.000385	0.000699
33	0.00035	0.000874	0.001293
34	0.000314	0.000314	0.000629
35	0.000105	0.000244	0.000488
36	6.96E-05	0.000348	0.000905
37	6.95E-05	0.000174	0.000278
38	0.000243	6.95E-05	0.000591
39	0.000104	0.000417	0.000799
40	0.000208	0.000347	0.000903
41	0.000347	0.000729	0.000764
42	0	0	0.000382
43	0.000451	0.000208	0.001007
44	0.000277	3.46E-05	0.000208
45	6.91E-05	0.000104	0.000588
46	0.000311	0.000484	0.000726
47	0.000104	0.000415	0.000449
48	0.000346	0.000276	0.000864
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2	0.000172	0.000413	0.000861
3	0.000448	0.000241	0.000654
4	0.000138	0.000413	0.000723
5	0.000275	0.000344	0.00062
6	0.000515	0.000378	0.000722
7	0.000137	0.000103	0.00079
8	0.000309	0.000309	0.000514
9	0.000239	0.000171	0.000205
10	0.000342	0.000649	0.000956
11	0.000341	0.000239	0.000683
12	0.000205	0.000273	0.000615
13	6.83E-05	0.000137	0.000614
14	0.00058	0.000546	0.00157
15	0.000239	0.000444	0.001126
16	0.000511	0.00058	0.001364
17	0.00017	0.000238	0.000443
18	0.000102	0.000204	0.00034
19	0.00017	0.000204	0.000476
20	0.00017	3.39E-05	0.000441
21	0.000136	0.000577	0.000916
22	0.000542	0.00088	0.002133
23	0.000338	0.00044	0.00088
24	0.000203	0.000473	0.000879
25	0.000203	0.000135	0.000608
26	0	3.37E-05	0.000472
27	6.75E-05	0.000236	0.000236
28	6.74E-05	0.000303	0.001315
29	0.000303	0.000505	0.001213
30	0.000168	0.000135	0.000337
31	0.000337	0.000471	0.000707
32	0.000101	6.73E-05	0.000673
33	6.73E-05	0.000135	0.000538
34	0.000303	0.000269	0.000673
35	0.000202	0.000269	0.000504
36	0.000302	0.000302	0.001143
37	3.36E-05	0	0.000235
38	6.71E-05	0.000269	0.001175
39	0.000302	0.000905	0.001609
40	0.000268	0.000201	0.000402
41	0.000134	0.000234	0.000903
42	0.000334	0.000368	0.000601
43	6.67E-05	0.000234	0.000334
44	0.0005	0.0005	0.001434
45	0.000366	0.000233	0.001066
46	0.000166	0.000166	0.000333
47	0.000133	0.000632	0.001498
48	3.33E-05	6.65E-05	0.000466
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2	0.000166	6.65E-05	0.0002
3	9.98E-05	0.000166	0.000399
4	0	0.000598	0.000731
5	0.000332	0.000564	0.001162
6	0.000497	0.00053	0.001359
7	0.000431	0.000166	0.000596
8	3.31E-05	0.000198	0.000793
9	6.61E-05	0.000198	9.91E-05
10	0.000231	0.000264	0.000231
11	3.3E-05	9.9E-05	0.000231
12	0.000198	0.000264	0.000363
13	0.000231	0.000297	0.00066
14	0.000297	6.6E-05	0.000231
15	9.88E-05	0.000362	0.000362
16	3.29E-05	0.000395	0.00089
17	0.000132	0.000132	0.000461
18	0.000659	0.000329	0.000165
19	0.000329	0.000856	0.001678
20	6.57E-05	3.29E-05	0.000329
21	0.000164	0.000427	0.000919
22	0.00023	0.00023	0.000755
23	0.000197	0.000525	0.000853
24	9.84E-05	6.56E-05	0.000262
25	0.000262	0.000426	0.000492
26	0	9.84E-05	0.00023
27	9.83E-05	0.000229	0.000459
28	6.53E-05	0.000327	0.000816
29	0.000196	0.00049	0.001077
30	6.52E-05	0.00013	0.000228
31	0.00013	0.000391	0.000619
32	6.51E-05	0.000261	0.000358
33	0.00013	9.74E-05	0.000227
34	0	3.24E-05	0.00026
35	0.000162	9.72E-05	0.000259
36	0.000162	0.000356	0.000648
37	0.000161	0.000161	0.000129
38	0.000129	0.000226	0.000516
39	0.000193	0.000645	0.001386
40	0	0.000129	0.00074
41	9.63E-05	3.21E-05	0.00016
42	3.2E-05	0	0.000288
43	0.000192	0.00048	0.000832
44	9.59E-05	0.000224	0.000416
45	6.39E-05	0.000224	0.000447
46	0.000191	0.000128	0.000287
47	0.000477	0.000318	0.00089
48	0.000603	0.000667	0.001238
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2	6.34E-05	3.17E-05	0.00019
3	0.00019	0.000221	0.000632
4	6.32E-05	0.000126	0.000442
5	6.32E-05	0.000189	0.000284
6			
7	0.000599	0.000536	0.001009
8	3.14E-05	0.000126	0.000251
9	6.27E-05	9.41E-05	0.000251
10	0.000188	0.000219	0.000814
11	6.25E-05	3.13E-05	0.000407
12			
13	0.000499	0.000343	0.001403
14	3.12E-05	9.35E-05	0.000218
15	0.000125	0.000716	0.00109
16	6.2E-05	0.000217	9.3E-05
17	0.000217	0.000217	0.000403
18	6.19E-05	0.000402	0.000526
19			
20	0	3.1E-05	0.000186
21	0.000123	9.26E-05	0.000617
22	3.08E-05	0	0.00037
23			
24	0.001017	0.001079	0.001542
25	9.25E-05	0.000709	0.000832
26	0	0.000123	0.000308
27	6.16E-05	0.000185	0.000801
28	0.000185	9.24E-05	0.000185
29	9.23E-05	9.23E-05	0.000462
30			
31	0.000338	0.000584	0.001413
32	3.07E-05	0.000184	0.000891
33	3.07E-05	9.21E-05	0.000246
34	0.000215	0.000276	0.000215
35	0.000214	0.000214	0.00052
36	0.000275	0.000459	0.000703
37			
38	3.06E-05	6.12E-05	0.000245
39	0.000214	0.00055	0.000519
40	0.000274	0.000243	0.000486
41	0.000182	0.000152	0.000395
42	0.000243	9.1E-05	0.000212
43			
44	0	0.000182	0.000303
45	3.01E-05	0	0.000271
46	0.000422	0.000602	0.000873
47	0.00012	0.000301	0.000452
48	0.000211	0.00018	0.000632
49	3.01E-05	9.02E-05	0.00024
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51	0	3E-05	3E-05
52	0.00021	0.00069	0.00138
53	8.99E-05	0.00012	0.00027
54	5.99E-05	0.00012	0.000359
55	5.99E-05	0.00015	0.000479
56	0.000299	0.000627	0.001314
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2	0.000328	0.000448	0.000657
3	0.000209	8.96E-05	0.000269
4	5.96E-05	8.94E-05	0.000209
5	2.98E-05	8.94E-05	0.000268
6	0.000208	0.001011	0.000506
7	0.000148	0.000801	0.001306
8	0.000148	0.000267	0.000415
9	0	5.93E-05	0.000178
10	0.000118	0.000296	0.000414
11	0.000118	0.000178	0.000326
12	0.000118	0.000177	0.000414
13	0	8.85E-05	0.000413
14	0.000412	0.000353	0.000854
15	8.81E-05	0.000352	0.000529
16	0.000147	0.000264	0.000498
17	0.000205	0.000205	0.000644
18	0.000263	0.000585	0.000848
19	2.92E-05	0.000614	0.000351
20	0.000117	0.000146	0.000204
21	0.000204	0.000234	0.000409
22	5.82E-05	0.000204	0.000698
23	5.81E-05	0.000232	0.000436
24	2.9E-05	5.81E-05	5.81E-05
25	0.000145	0.000261	0.000958
26	0.000406	0.000174	0.000493
27	0.000261	0.000319	0.000551
28	0.000203	0.000203	0.000725
29	2.9E-05	0.00029	0.000406
30	0.000116	0.000116	0.000434
31	0.000347	0.000347	0.000838
32	5.76E-05	2.88E-05	2.88E-05
33	0.000115	0.000317	0.000346
34	0.000144	0.00023	0.000202
35	0.000259	0.000144	0.000259
36	5.75E-05	0.000144	0.000517
37	0.000115	0.000373	0.000603
38	0.000172	2.86E-05	0.000602
39	2.86E-05	0.000143	0.000286
40	2.86E-05	0.000457	0.000514
41	0.000114	5.71E-05	0.000229
42	0.000114	0.000343	0.000571
43	0.0002	0.000228	0.0004
44	0	2.85E-05	0.000314
45	0.000114	5.69E-05	0.000228
46	0.000369	0.000426	0.000682
47	0.000312	0.00017	0.000681
48	0.000142	0.00051	0.000425
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2	8.49E-05	0.000113	0.000311
3	0.000452	0.000593	0.001045
4	2.82E-05	2.82E-05	0.000536
5	5.64E-05	0.000113	2.82E-05
6	5.63E-05	0.000197	0.000563
7	0.000168	0.000224	0.000253
8	0.00014	0.000112	0.000252
9	0.00028	0.000252	0.000813
10	0	0	0.000224
11	0.000112	0.00014	0.00042
12	0.00014	2.8E-05	0.000224
13	0.000279	0.000391	0.000782
14	8.36E-05	0.000279	0.000529
15	0.000167	0.000362	0.001253
16	2.79E-05	0.000111	0.000111
17	0.000111	0.000389	0.000528
18	0.000167	0.000139	0.000361
19	0.000167	0.000472	0.001
20	0.000859	0.000305	0.00097
21	5.52E-05	0.000496	0.000441
22	0.000524	0.000303	0.001076
23	0	0.00011	0.00011
24	0.000302	0.000549	0.000878
25	5.48E-05	0.000466	0.000713
26	5.47E-05	0.000137	0.000383
27	0	5.46E-05	0.000109
28	0	5.44E-05	0.000136
29	0.000163	0.000435	0.000571
30	0.000109	5.44E-05	0.000272
31	0	8.15E-05	5.43E-05
32	0.000407	0.00019	0.000434
33	0	8.12E-05	0.000244
34	2.7E-05	8.11E-05	0.000216
35	0.000216	0.000459	0.000837
36	0.000269	0.00035	0.000485
37	0.000296	0.00035	0.000943
38	0.000457	0.000215	0.000672
39	0.000161	0.000107	0.000215
40	0.000107	0.000134	0.000241
41	0.000134	0.000456	0.000697
42	0	5.35E-05	8.02E-05
43	0.000321	0.000508	0.000615
44	0.000588	0.000722	0.001257
45	5.34E-05	5.34E-05	0.000134
46	0.00016	0.000373	0.00144
47	2.66E-05	0.000186	0.000373
48	0.000399	0.000293	0.000399
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2	0.000771	0.000718	0.001835
3	0.000212	0.000318	0.000292
4	0.000238	0.000318	0.00045
5	7.94E-05	7.94E-05	0.000238
6	0.000132	0.000556	0.000371
7	5.29E-05	0.000317	0.000767
8	5.29E-05	7.93E-05	0.000159
9	0.000132	0.000158	0.000422
10	0	2.64E-05	0.000185
11	0.000527	0.000764	0.000606
12	0	0	0.000184
13	7.87E-05	0	0.000131
14	0.000105	5.24E-05	0.000288
15	0.000157	0.000131	0.00055
16	0.000105	0.000209	0.000575
17	2.6E-05	5.21E-05	0.000104
18	0	2.59E-05	0.000129
19	0	5.18E-05	5.18E-05
20	2.59E-05	0.000129	0.000259
21	0.000232	0.000129	0.000981
22	0.000387	0.000413	0.000748
23	0.000284	0.000516	0.000825
24	0.000154	0.000257	0.0009
25	0.00018	0.00018	0.000385
26	0.000154	0.000359	0.000795
27	0.000154	0.000102	0.00023
28	5.12E-05	0.000282	0.000179
29	5.11E-05	0.000409	0.00092
30	2.55E-05	7.66E-05	0.000255
31	0.000382	0.00056	0.001068
32	0.000127	0.000305	0.000585
33	2.54E-05	5.08E-05	7.62E-05
34	0	5.08E-05	0.000152
35	0	7.62E-05	0.00061
36	0.000127	0.000127	0.000355
37	0.000127	0.000177	0.000304
38	0.000177	0.000152	0.000202
39	2.52E-05	0	0.000151
40	2.52E-05	7.57E-05	0.000328
41	0.000126	0.000227	0.000504
42	0.000126	5.03E-05	0.000252
43	0.000125	0.000301	0.000427
44	0	7.49E-05	0.000324
45	7.48E-05	0.000174	0.000374
46	0.000124	0.000274	0.000597
47	2.48E-05	4.96E-05	0.000347
48	0.000223	0.000223	0.000322
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2	7.44E-05	0.000149	0.000174
3	0.000124	0.000124	0.000223
4	4.94E-05	9.89E-05	0.000222
5	4.93E-05	0.000394	0.000665
6	7.38E-05	9.84E-05	0.000197
7	4.92E-05	7.38E-05	7.38E-05
8	7.38E-05	9.84E-05	0.000271
9	0.00027	0.000221	0.000565
10	0.000368	0.000172	0.000294
11	2.45E-05	4.9E-05	0.000147
12	0.000147	4.9E-05	0.000269
13	0.00017	7.29E-05	0.000583
14	0.000219	0.000243	0.000121
15	0.000146	0.000218	0.000364
16	0.000194	0.000291	0.000679
17	0.000121	0.000218	0.000558
18	7.26E-05	0.00029	0.000581
19	2.41E-05	2.41E-05	9.65E-05
20	0.000217	0.000145	0.000482
21	2.41E-05	0.000168	0.000385
22	4.81E-05	2.41E-05	0.000938
23	2.4E-05	0	0.000264
24	0.000192	0.000144	0.000433
25	0.00024	0.000192	0.00036
26	9.6E-05	0.000144	0.000408
27	0.000312	0.00024	0.00036
28	2.39E-05	4.78E-05	4.78E-05
29	0.000239	0.000334	0.000621
30	2.39E-05	2.39E-05	0.000215
31	2.38E-05	0.000358	0.000668
32	7.15E-05	0.000191	0.000238
33	9.48E-05	7.11E-05	0.000332
34	0.000118	0.000403	0.000474
35	0.000118	0.000331	0.001231
36	2.37E-05	4.73E-05	0.000213
37	0.000118	0.000165	0.000118
38	0.000118	0.000329	0.000588
39	0.000211	0.000423	0.00054
40	4.69E-05	4.69E-05	0.000211
41	0	9.38E-05	0.000235
42	0.000141	0.000187	0.000562
43	9.37E-05	0.000328	0.000468
44	7.02E-05	9.36E-05	0.000234
45	0	9.34E-05	0.000537
46	0.000117	9.34E-05	0.00035
47	9.34E-05	4.67E-05	7E-05
48	0.000326	0.00042	0.000513
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2	0	0.000256	0.000606
3	0.000139	0.000116	0.000579
4	9.24E-05	0.000162	0.000208
5	0.000138	0.00023	0.000346
6	9.18E-05	6.89E-05	0.000367
7	0.000298	0.000574	0.001102
8	0.000252	0.000275	0.000482
9	0.00016	0.000298	0.000641
10	0.000228	0.000411	0.000502
11	2.28E-05	9.13E-05	0.000342
12	9.09E-05	0.000159	0.000364
13	0.000136	6.8E-05	0.000113
14	0.00034	0.000249	0.000204
15	4.53E-05	0.000136	0.000453
16	0	9.02E-05	0.000271
17	9E-05	0.000113	0.000113
18	0.000202	0.000157	0.000584
19	4.48E-05	8.95E-05	0.000269
20	0.000112	0.000358	0.000782
21	0.000313	0.00038	0.000581
22	0.000178	0.000245	0.000178
23	0.0002	0.000134	0.000423
24	0	0.000111	0.0002
25	6.67E-05	0.000111	0.000289
26	2.22E-05	0.000245	0.000333
27	0.000267	0.000244	0.000444
28	0.000156	2.22E-05	0.0002
29	0.000244	0.000444	0.001444
30	4.43E-05	0.000155	0.000266
31	4.43E-05	8.86E-05	0.000266
32	2.21E-05	4.42E-05	0.000133
33	4.41E-05	0.000287	0.000375
34	6.6E-05	4.4E-05	0.000176
35	2.2E-05	0.00011	0.000352
36	0.000286	0.000198	0.000439
37	0.000241	0.000372	0.000437
38	8.72E-05	6.54E-05	0.000131
39	8.72E-05	0.000131	0.000218
40	0.000152	0.000131	0.000327
41	0.000196	0.000152	0.000457
42	0	4.31E-05	0.000151
43	8.62E-05	0.000323	0.000733
44	0.000215	0.000237	0.000495
45	8.61E-05	8.61E-05	0.000194
46	0.000151	0.000194	0.000452
47	0.000451	0.000322	0.000881
48	2.15E-05	4.29E-05	0.000172
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2	0.000536	0.000321	0.000986
3	0.000107	0.000107	0.000449
4	0.000171	0.000128	0.000299
5	4.27E-05	0.000171	0.000256
6	4.27E-05	2.13E-05	0.000107
7	2.13E-05	4.27E-05	0.000384
8	0.000341	0.00032	0.000811
9	2.13E-05	0.000107	0.000213
10	0.000128	0.000255	0.000447
11	0.000128	0.000319	0.000575
12	0.000106	0.000529	0.000233
13	0.000296	0.000677	0.000275
14	0.000106	8.45E-05	0.000106
15	0.000127	0.000338	0.000338
16	0	0.000127	0.000169
17	0	0.000148	0.000232
18	4.21E-05	0	0.000232
19	4.21E-05	4.21E-05	8.42E-05
20	0.000147	0.000461	0.000629
21	0.000586	0.000251	0.000524
22	6.28E-05	0.000293	0.000377
23	0.000251	0.000335	0.000335
24	0.000104	0.000125	0.000272
25	2.09E-05	2.09E-05	0.000167
26	0	0	6.26E-05
27	0.000146	0.000146	0.000542
28	0.000125	0.000271	0.000291
29	0.000104	0.000208	0.000167
30	0.000187	0.000166	0.000499
31	6.23E-05	0.000249	0.000312
32	0.000104	0.000104	0.000208
33	8.28E-05	0.000166	0.000331
34	0.000207	0.000103	0.000496
35	6.2E-05	0.000207	0.000475
36	0.000124	0.000124	0.000289
37	0.000123	0.000247	0.000597
38	0.000144	6.16E-05	0.000267
39	4.11E-05	0.000205	0.000267
40	0.000246	0.000226	0.000369
41	0.000102	0.000123	0.000225
42	0.000265	0.000306	0.001
43	0.000163	0.000163	0.000286
44	0	0	4.08E-05
45	6.12E-05	0.000143	0.000306
46	0.000265	0.000102	0.000367
47	8.14E-05	0.000183	0.000407
48	0.000122	0.000122	0.000143
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2	8.13E-05	0	0.000203
3	0.000163	0.000244	0.00061
4	4.06E-05	0.000122	0.000568
5	4.05E-05	0.000142	0.000203
6	6.07E-05	0.000223	0.000142
7	0.000121	0.000182	0.000384
8	8.05E-05	0.000402	0.000784
9	8.04E-05	0.000221	0.000422
10	0.00014	0.00014	0.000361
11	8.03E-05	0.000381	0.000421
12	0	0.000139	0.000179
13	0.000299	0.000418	0.000756
14	0.000259	0.000398	0.000736
15	7.96E-05	0.000219	0.000279
16	0	5.96E-05	0.000199
17	7.95E-05	7.95E-05	0.000338
18	0.000238	0.000119	0.000397
19	9.91E-05	9.91E-05	0.000278
20	9.89E-05	0.000158	0.000178
21	1.98E-05	5.93E-05	0.000217
22	0.000138	9.87E-05	0.000296
23	0.000178	0.000296	0.000631
24	5.91E-05	7.88E-05	0.000138
25	1.97E-05	1.97E-05	9.84E-05
26	9.83E-05	0.000118	0.000216
27	0.000255	0.000236	0.000452
28	7.85E-05	0.000118	0.000549
29	1.95E-05	7.82E-05	0.000176
30	7.81E-05	0.000156	0.000195
31	9.76E-05	0.000215	0.00039
32	9.76E-05	0.000273	0.000507
33	0	1.95E-05	3.9E-05
34	0.00037	0.000272	0.00035
35	0	3.88E-05	0.000272
36	9.69E-05	3.88E-05	5.82E-05
37	0.000213	0.000232	0.000387
38	0.000213	0.00031	0.000929
39	0.000116	0.000154	0.000212
40	0	0.000116	7.7E-05
41	7.68E-05	0.000134	0.000403
42	5.76E-05	0.000307	0.000499
43	0.000173	0.000134	0.000364
44	0	7.67E-05	0.000441
45	0	0	0.000134
46	1.91E-05	5.73E-05	0.000344
47	1.9E-05	0	0.000133
48	5.7E-05	0.000228	0.000304
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2	0.000114	9.47E-05	0.000133
3	0.000132	5.68E-05	0.000303
4	3.78E-05	3.78E-05	0.000113
5	5.67E-05	0.000151	0.000434
6	0.000227	0.000283	0.000246
7	7.55E-05	5.66E-05	0.000359
8	0.000226	0.000547	0.000773
9	0.000132	0.000132	0.000339
10	0.000225	0.000376	0.000658
11	9.39E-05	0.000113	5.64E-05
12	9.39E-05	0.000113	0.000131
13	0.000113	0.000188	0.000225
14	9.38E-05	0.000188	0.000432
15	0.000206	0.00015	0.000281
16	1.87E-05	1.87E-05	0.000112
17	0.000223	0.000297	0.000613
18	1.86E-05	7.42E-05	0.000167
19	0.00013	0.000427	0.000371
20	7.39E-05	1.85E-05	5.54E-05
21	5.54E-05	0.000166	0.00037
22	1.85E-05	7.39E-05	0.000277
23	0	0.000203	0.000258
24	0.000147	0.000147	0.000331
25	0.000128	0.00022	0.000404
26	0.000294	0.000239	0.000606
27	9.16E-05	7.33E-05	0.00033
28	0.000183	0.000183	0.000476
29	0.000347	0.000256	0.000804
30	1.83E-05	1.83E-05	0.000146
31	0.000146	0.000182	0.000382
32	0.000163	0.000236	0.000309
33	0.000254	0.000163	0.000508
34	0.000326	0.000399	0.000471
35	1.81E-05	5.43E-05	3.62E-05
36	7.23E-05	0.000126	0.000199
37	0.000108	0.000126	0.000415
38	5.4E-05	0	3.6E-05
39	0.000144	0.000126	0.000324
40	7.17E-05	0.000126	0.000179
41	7.17E-05	5.38E-05	0.000125
42	8.93E-05	0.000161	0.000375
43	0	0	0.000107
44	1.78E-05	3.56E-05	3.56E-05
45	0.000142	7.12E-05	0.000196
46	8.9E-05	0.00016	0.000285
47	0	1.78E-05	0.00016
48	0.000107	0.000142	0.000178
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2	8.83E-05	0.000124	0.00023
3	0.000264	0.000141	0.000422
4	7.02E-05	0.00014	0.000281
5	3.51E-05	1.75E-05	1.75E-05
6	7.01E-05	0.00021	0.000245
7	0.00021	0.000227	0.000577
8	0.000122	0.000332	0.000419
9	6.98E-05	0.000279	0.000244
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11	0	0.000122	0.000261
12	0	5.21E-05	0.000434
13	6.95E-05	8.68E-05	0.000156
14	5.2E-05	0.000139	0.00033
15	8.65E-05	3.46E-05	0.00019
16	3.46E-05	1.73E-05	0.000207
17	3.45E-05	3.45E-05	0.000121
18	3.45E-05	0.000155	0.000172
19	0.000121	6.89E-05	0.000189
20	0.000207	0.000155	0.000499
21	0.000172	0.000189	0.000395
22	0.00012	0.000154	0.000411
23	0.000137	0.000188	0.000342
24	0.000359	0.000513	0.00077
25	0.000325	0.000239	0.000667
26	1.71E-05	5.12E-05	0.000188
27	0.000102	0	6.82E-05
28	0	1.7E-05	6.81E-05
29	3.4E-05	0.000238	5.11E-05
30	5.1E-05	0.000136	0.000221
31	0.000204	0.00017	0.000424
32	8.48E-05	5.09E-05	0.000102
33	8.47E-05	0.000186	0.000271
34	0.000101	0.000219	0.000456
35	0.000878	0.000506	0.001216
36	1.69E-05	5.06E-05	0.000135
37	0.000101	0.000337	0.000422
38	0	3.36E-05	6.72E-05
39	0.000251	0.000201	0.000368
40	0.00015	0.000233	0.000399
41	0	1.66E-05	4.98E-05
42	4.98E-05	4.98E-05	0.000299
43	9.94E-05	1.66E-05	0.000265
44	0	3.31E-05	0.000166
45	0.000116	0.000215	0.000231
46	0.000149	0.000182	0.000446
47	1.65E-05	0.000116	0.000149
48	0.000214	0.000379	0.001187
49	4.95E-05	8.25E-05	0.000148
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2	0.000345	0.000246	0.000723
3	8.19E-05	0.00018	0.000311
4	1.64E-05	8.19E-05	0.00018
5	0.000213	0.00036	0.000524
6	0.000114	0.000114	0.000327
7	6.51E-05	8.13E-05	0
8	8.12E-05	9.75E-05	0.000357
9	4.87E-05	0.000244	0.000357
10	6.49E-05	0.000389	0.000341
11	0	3.24E-05	0.000114
12	0.000243	0.000113	0.000405
13	0.000259	0.000356	0.000631
14	1.62E-05	0.000129	0.000113
15	0.000161	0.000194	0.000549
16	0.000161	0.000258	0.000484
17	9.63E-05	1.61E-05	0
18	1.59E-05	0.000286	0.000318
19	1.59E-05	3.18E-05	0.000207
20	0	9.53E-05	0.000254
21	0.000111	0.000127	0.000253
22	0.000142	0.000157	0.00052
23	9.43E-05	0.000126	0.000314
24	3.14E-05	0.00022	0.000267
25	0.000157	9.43E-05	0.000189
26	1.57E-05	0	4.71E-05
27	7.81E-05	0.000187	0.000187
28	0	1.56E-05	7.79E-05
29	4.66E-05	3.11E-05	7.77E-05
30	7.76E-05	7.76E-05	0.00014
31	3.09E-05	1.55E-05	6.19E-05
32	0.000247	0.00034	0.000556
33	0	0	7.7E-05
34	7.69E-05	0.000169	0.000262
35	1.54E-05	0.000123	0.000277
36	0	0.000123	0.00023
37	0.000215	0.000337	0.000981
38	0.000122	0.000122	0.000275
39	9.18E-05	0.000214	0.000474
40	0.000198	9.15E-05	0.000244
41	6.09E-05	9.14E-05	0.000152
42	6.09E-05	7.61E-05	0.000152
43	7.6E-05	9.13E-05	0.000228
44	1.52E-05	1.52E-05	0.000182
45	1.52E-05	9.1E-05	0.000379
46	0.000136	0.000258	0.0005
47	6.06E-05	0.000136	7.57E-05
48	0	1.5E-05	0.000135
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2	4.5E-05	9E-05	9E-05
3	6E-05	0.00024	0.000285
4	0.00015	0.000255	0.000584
5	1.5E-05	7.49E-05	5.99E-05
6	4.49E-05	2.99E-05	0.000135
7	1.49E-05	2.99E-05	8.96E-05
8	0	5.96E-05	8.94E-05
9	2.97E-05	1.49E-05	0.000149
10	0.000133	5.93E-05	8.9E-05
11	1.48E-05	8.89E-05	0.000237
12	2.95E-05	0.000103	0.000133
13	0.000207	0.000295	0.000428
14	4.42E-05	4.42E-05	0.000103
15	8.83E-05	0.000147	0.000353
16	0.000103	0.000147	0.00022
17	2.93E-05	0.000161	0.000293
18	2.93E-05	1.46E-05	5.85E-05
19	4.36E-05	5.81E-05	4.36E-05
20	0	0	2.91E-05
21	0.000101	7.22E-05	0.000303
22	4.33E-05	5.78E-05	0.000116
23	0.000144	0.000101	0.000202
24	7.21E-05	0.000231	0.000375
25	0.000245	0.000303	0.00088
26	0.00013	0.000202	0.000274
27	2.88E-05	7.2E-05	0.000317
28	0.000115	7.19E-05	0.000158
29	0.000101	8.62E-05	0.000129
30	5.74E-05	0.000115	0.000201
31	8.61E-05	0.000115	0.000273
32	0.000115	0.000172	0.000158
33	0.0002	0.0002	0.000272
34	1.43E-05	0.000186	0.000286
35	5.7E-05	0.000171	0.000413
36	0.000185	0.000413	0.000398
37	4.25E-05	4.25E-05	0.000113
38	0	0.000113	0.000198
39	4.24E-05	0	4.24E-05
40	0.000169	0.000183	0.000197
41	4.22E-05	0.000113	5.63E-05
42	4.22E-05	0.000183	0.000281
43	0.000239	0.000225	0.000505
44	0.000196	0.000308	0.000364
45	5.58E-05	5.58E-05	9.77E-05
46	6.98E-05	1.4E-05	6.98E-05
47	4.17E-05	0.000195	0.00032
48	1.39E-05	1.39E-05	0.000125
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2	1.38E-05	0	6.91E-05
3	1.38E-05	5.53E-05	5.53E-05
4	0.00011	0.000124	0.00022
5	6.88E-05	5.5E-05	8.25E-05
6	4.11E-05	5.48E-05	0.000206
7	4.11E-05	0.000205	0.000356
8	1.37E-05	0	0.000123
9	4.08E-05	0.00015	9.52E-05
10	8.11E-05	9.46E-05	0.000284
11	0.000189	0.000351	0.000824
12	8.09E-05	2.7E-05	8.09E-05
13	2.69E-05	2.69E-05	8.07E-05
14	0.000161	0.000174	0.000335
15	9.37E-05	0.000134	0.000388
16	6.67E-05	9.34E-05	0.00012
17	0	3.99E-05	7.99E-05
18	0.000106	0.000146	0.000318
19	7.95E-05	0.000133	0.000119
20	7.95E-05	0.000225	0.000371
21	2.65E-05	9.27E-05	0.000238
22	7.94E-05	0.000185	0.000715
23	6.61E-05	3.97E-05	0.000159
24	6.61E-05	0.000185	0.000396
25	6.6E-05	0.00029	0.000475
26	5.28E-05	3.96E-05	0.000132
27	0.000251	0.000185	0.000303
28	0.000551	0.000381	0.000722
29	0	1.3E-05	0.000104
30	0	0	0.000117
31	0.000156	0.000104	0.000312
32	0	2.6E-05	5.2E-05
33	9.04E-05	0.000142	0.000607
34	2.58E-05	3.86E-05	7.73E-05
35	0.000103	2.57E-05	0.000103
36	0.000141	0.000128	0.000243
37	2.56E-05	7.67E-05	0.000153
38	2.56E-05	5.12E-05	0.000102
39	0.000127	0.000102	0.000153
40	1.27E-05	1.27E-05	0.000166
41	0	2.54E-05	0.00014
42	2.53E-05	3.8E-05	2.53E-05
43	2.53E-05	7.59E-05	2.53E-05
44	0.000114	0.000139	0.000228
45	7.56E-05	5.04E-05	3.78E-05
46	0	5.03E-05	0.000138
47	5.03E-05	5.03E-05	0.000277
48	0.000201	0.000314	0.000478
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2	5.03E-05	0.000138	0.000138
3	0	3.77E-05	0.000113
4	5E-05	0.000113	0.000138
5	0	1.25E-05	0.000137
6	3.74E-05	3.74E-05	8.73E-05
7	7.48E-05	0.000175	0.000187
8	6.23E-05	0.000125	0.000212
9	0.000161	0.000124	0.000186
10	0	0	3.72E-05
11	0	1.24E-05	3.72E-05
12	9.92E-05	4.96E-05	0.000223
13	4.96E-05	6.2E-05	0.000124
14	1.24E-05	0.000198	0.000111
15	9.86E-05	0.000123	0.000271
16	4.93E-05	4.93E-05	0.000185
17	0	0	0
18	0	4.89E-05	0.000159
19	8.49E-05	0.000121	0.000206
20	0	2.43E-05	9.7E-05
21	0.00017	0.00074	0.000885
22	2.42E-05	3.62E-05	7.25E-05
23	2.41E-05	3.62E-05	8.45E-05
24	8.39E-05	1.2E-05	1.2E-05
25	3.59E-05	9.58E-05	0.000287
26	4.78E-05	3.59E-05	2.39E-05
27	8.33E-05	0.000107	9.52E-05
28	7.12E-05	5.93E-05	0.000214
29	0	3.56E-05	0.000154
30	0.000142	0.000237	0.000438
31	0.000189	0.000142	0.000473
32	2.36E-05	0.000212	0.00026
33	0	4.71E-05	0.000271
34	3.52E-05	1.17E-05	0.000129
35	4.66E-05	8.16E-05	0.000222
36	5.82E-05	0.00014	0.000151
37	6.94E-05	0.000197	0.000474
38	9.18E-05	0.000161	0.000356
39	9.15E-05	0.000194	0.000275
40	8E-05	0.000103	0.000172
41	5.71E-05	2.28E-05	0.000217
42	7.97E-05	0.000159	0.000285
43	2.28E-05	0.000102	0.000182
44	2.26E-05	4.53E-05	0.000147
45	2.26E-05	0	9.05E-05
46	2.26E-05	0.000317	0.000498
47	0.000102	0.000192	0.000497
48	9.02E-05	0.000169	0.000349
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0	5.63E-05	0.000135
0.000113	0.000113	0.00018
5.62E-05	0.000101	0.000169
3.37E-05	3.37E-05	7.86E-05
0.000101	4.49E-05	0.000213
5.6E-05	0.00028	0.000516
0.000157	0.000224	0.000481
0	0.000133	8.89E-05
1.11E-05	1.11E-05	0.000111
1.11E-05	7.75E-05	0.00021
6.64E-05	0.000111	0.000277
0.000221	0.000496	0.001081
0	1.1E-05	6.61E-05
2.2E-05	4.4E-05	7.71E-05
0.000121	9.9E-05	0.000132
1.1E-05	4.4E-05	7.7E-05
3.3E-05	0.000132	0.000363
0	7.67E-05	5.48E-05
9.82E-05	0.000131	0.000196
1.09E-05	0.000109	0.000239
0.000108	0.000108	0.000162
3.22E-05	3.22E-05	0.000118
5.35E-05	7.49E-05	0.000171
2.13E-05	2.13E-05	4.25E-05
8.47E-05	0.000191	0.000254
4.24E-05	4.24E-05	8.47E-05
0.000105	5.24E-05	0.000115
1.03E-05	1.03E-05	7.21E-05
1.03E-05	7.21E-05	0.000113
0	6.13E-05	6.13E-05
0.000193	0.000203	0.000569
7.02E-05	9.02E-05	0.00015
0.00018	0.00013	0.00025
5.99E-05	6.99E-05	7.98E-05
9.94E-06	5.97E-05	8.95E-05
8.91E-05	4.95E-05	0.000119
4.95E-05	8.91E-05	0.000178
5.92E-05	4.94E-05	9.87E-05
3.95E-05	9.87E-06	9.87E-05
1.97E-05	8.86E-05	0.000158
8.78E-05	5.86E-05	0.000146
9.74E-05	9.74E-05	0.000156
2.9E-05	2.9E-05	2.9E-05
9.67E-06	2.9E-05	4.83E-05
0	1.93E-05	8.7E-05
9.6E-06	5.76E-05	7.68E-05
4.79E-05	7.67E-05	0.000278

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2	1.89E-05	9.44E-05	0.00017
3	3.76E-05	6.59E-05	0.000104
4	6.57E-05	0.000244	0.000291
5	0	3.74E-05	0.000103
6	3.74E-05	2.8E-05	5.6E-05
7	9.28E-05	4.64E-05	0.000251
8	1.85E-05	2.78E-05	9.27E-05
9	0	2.78E-05	3.7E-05
10	4.59E-05	0.000138	0.000284
11	4.57E-05	0.00011	0.000293
12	0.0001	8.21E-05	6.38E-05
13	2.73E-05	5.46E-05	0.000336
14	5.46E-05	2.73E-05	6.36E-05
15	1.82E-05	9.09E-06	7.27E-05
16	9.09E-05	3.63E-05	9.99E-05
17	8.13E-05	8.13E-05	7.23E-05
18	0.000351	0.000306	0.001081
19	2.7E-05	5.4E-05	7.2E-05
20	3.6E-05	3.6E-05	5.4E-05
21	4.46E-05	5.35E-05	5.35E-05
22	0.000116	0.000187	0.000276
23	0	1.77E-05	0
24	8.78E-05	5.27E-05	0.000184
25	0	2.63E-05	7.89E-05
26	0	2.63E-05	9.63E-05
27	3.5E-05	5.25E-05	1.75E-05
28	4.35E-05	7.84E-05	0.000113
29	0.000113	8.67E-05	0.000104
30	0	5.2E-05	3.46E-05
31	4.32E-05	0.000104	7.78E-05
32	0.00013	1.73E-05	0.000225
33	1.73E-05	8.64E-06	2.59E-05
34	5.18E-05	2.59E-05	0.000112
35	1.72E-05	8.61E-05	0.000232
36	1.71E-05	1.71E-05	9.42E-05
37	1.7E-05	5.11E-05	8.51E-05
38	0.000102	0.000127	0.000279
39	1.69E-05	5.06E-05	0.000101
40	0.000118	5.06E-05	0.00011
41	2.49E-05	1.66E-05	4.99E-05
42	7.4E-05	4.11E-05	0.000148
43	8.22E-06	2.47E-05	6.58E-05
44	4.11E-05	8.22E-05	0.000148
45	8.19E-06	5.73E-05	8.19E-05
46	0.000139	0.000106	0.000205
47	1.63E-05	7.34E-05	0.000188
48	6.52E-05	8.97E-05	0.000122
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2	7.34E-05	2.45E-05	0.00013
3	2.44E-05	1.63E-05	8.14E-05
4	8.14E-06	1.63E-05	2.44E-05
5	0	8.12E-06	4.87E-05
6	4.85E-05	0.000129	9.7E-05
7	4.83E-05	8.04E-05	8.85E-05
8	4E-05	0	3.2E-05
9	4.79E-05	6.39E-05	0.00024
10	3.97E-05	9.52E-05	0.000246
11	2.38E-05	3.17E-05	0.000119
12	4.72E-05	1.57E-05	4.72E-05
13	0	7.82E-06	3.13E-05
14	2.33E-05	8.56E-05	0.000148
15	7.75E-05	0.000108	0.000263
16	0	2.32E-05	6.19E-05
17	4.62E-05	5.39E-05	6.16E-05
18	2.31E-05	2.31E-05	0.000115
19	7.67E-06	3.07E-05	3.84E-05
20	0	0	3.84E-05
21	3.01E-05	7.53E-05	0.000136
22	1.5E-05	4.49E-05	3.75E-05
23	8.22E-05	6.73E-05	0.000127
24	1.49E-05	5.22E-05	6.71E-05
25	2.97E-05	2.97E-05	0.000171
26	0	5.18E-05	0.000133
27	0.000118	8.87E-05	0.000177
28	7.36E-06	3.68E-05	0.000118
29	7.33E-05	0.000103	9.52E-05
30	4.39E-05	6.59E-05	0.000198
31	5.12E-05	6.58E-05	5.85E-05
32	5.81E-05	2.18E-05	5.08E-05
33	7.24E-06	7.24E-06	7.97E-05
34	2.17E-05	5.79E-05	6.52E-05
35	7.24E-06	3.62E-05	7.24E-05
36	7.15E-06	7.15E-06	5.01E-05
37	7.86E-05	7.86E-05	0.000243
38	5E-05	8.58E-05	0.000172
39	3.57E-05	4.28E-05	5.71E-05
40	2.14E-05	4.99E-05	0.000199
41	3.55E-05	0.000192	0.00017
42	2.13E-05	7.08E-05	0.00012
43	2.12E-05	7.06E-05	0.000191
44	1.41E-05	4.24E-05	8.47E-05
45	4.86E-05	2.78E-05	6.25E-05
46	2.78E-05	0	9.03E-05
47	0.000187	0.000159	0.000381
48	2.76E-05	7.59E-05	0.000131
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2	8.96E-05	0.000124	0.000248
3	0	0	2.06E-05
4	0.000124	0.00048	0.00083
5	2.74E-05	4.11E-05	0.000117
6	2.05E-05	9.58E-05	8.89E-05
7	4.08E-05	6.81E-05	9.53E-05
8	2.71E-05	4.74E-05	2.71E-05
9	0.000122	5.42E-05	0.000169
10	6.06E-05	9.43E-05	0.000175
11	2.02E-05	2.02E-05	1.34E-05
12	2.01E-05	2.01E-05	4.03E-05
13	4.02E-05	4.02E-05	4.69E-05
14	2.01E-05	2.01E-05	6.69E-05
15	1.34E-05	3.34E-05	7.35E-05
16	1.34E-05	1.34E-05	0.00014
17	6.68E-05	7.35E-05	0.000154
18	4E-05	2E-05	0.000107
19	2.65E-05	4.64E-05	6.63E-05
20	1.98E-05	0.000159	0.000291
21	6.61E-05	5.29E-05	0.000205
22	5.28E-05	1.32E-05	6.6E-06
23	6.59E-05	2.63E-05	1.98E-05
24	3.94E-05	3.94E-05	5.26E-05
25	0.000204	5.25E-05	0.000151
26	2.62E-05	3.27E-05	7.85E-05
27	2.61E-05	1.3E-05	8.47E-05
28	0.000104	7.81E-05	0.000273
29	2.6E-05	9.74E-05	0.00013
30	6.48E-06	2.59E-05	4.54E-05
31	1.29E-05	3.23E-05	5.17E-05
32	6.45E-06	0	6.45E-06
33	4.48E-05	5.12E-05	0.000109
34	4.47E-05	6.38E-05	0.000179
35	1.89E-05	3.78E-05	0.000113
36	1.88E-05	3.75E-05	0.0001
37	5.62E-05	8.74E-05	0.000112
38	6.23E-06	4.99E-05	6.85E-05
39	2.48E-05	5.58E-05	0.000143
40	6.2E-06	2.48E-05	4.34E-05
41	4.93E-05	4.31E-05	9.85E-05
42	1.83E-05	1.22E-05	6.08E-05
43	0.000145	0.000115	0.000321
44	3.01E-05	3.01E-05	5.42E-05
45	0	6.01E-06	3.6E-05
46	2.39E-05	2.99E-05	7.17E-05
47	5.37E-05	2.98E-05	6.57E-05
48	2.38E-05	1.19E-05	2.38E-05
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2	1.78E-05	3.56E-05	8.31E-05
3	1.18E-05	4.14E-05	8.88E-05
4	2.95E-05	4.13E-05	7.68E-05
5	2.34E-05	0	5.84E-06
6	7.58E-05	8.75E-05	0.000175
7	4.08E-05	8.16E-05	0.000198
8	2.9E-05	6.38E-05	0.000191
9	5.79E-06	1.74E-05	1.74E-05
10	2.29E-05	6.31E-05	6.88E-05
11	5.69E-06	2.84E-05	2.84E-05
12	5.1E-05	5.67E-05	0.00017
13	1.13E-05	1.13E-05	9.06E-05
14	5.59E-05	6.15E-05	0.00014
15	5.58E-05	7.81E-05	0.000156
16	0	1.67E-05	1.12E-05
17	5.54E-06	2.22E-05	3.33E-05
18	5.53E-06	1.66E-05	1.11E-05
19	0.000104	0.000175	0.000372
20	5.97E-05	1.63E-05	0.000119
21	2.71E-05	3.25E-05	5.42E-05
22	1.07E-05	8.04E-05	7.5E-05
23	3.73E-05	4.27E-05	9.06E-05
24	1.59E-05	3.71E-05	5.83E-05
25	5.26E-05	4.74E-05	7.37E-05
26	3.12E-05	5.2E-05	9.88E-05
27	5.2E-06	0	3.64E-05
28	5.16E-06	1.03E-05	5.68E-05
29	2.06E-05	5.66E-05	9.27E-05
30	2.05E-05	1.54E-05	2.05E-05
31	5.11E-06	0	7.16E-05
32	5.1E-06	3.06E-05	2.04E-05
33	1.53E-05	1.53E-05	5.09E-05
34	1.52E-05	2.54E-05	3.05E-05
35	0	1.52E-05	0
36	5.56E-05	6.57E-05	0.000101
37	0	2.02E-05	6.06E-05
38	1.51E-05	2.02E-05	2.02E-05
39	5E-06	5E-05	4E-05
40	3.46E-05	4.45E-05	4.94E-05
41	4.93E-05	4.44E-05	6.9E-05
42	9.36E-05	5.42E-05	0.000123
43	3.43E-05	6.37E-05	9.8E-05
44	3.92E-05	3.43E-05	4.41E-05
45	0.000132	0.000102	0.000215
46	0	4.85E-06	7.28E-05
47	9.68E-06	2.9E-05	7.74E-05
48	0	4.82E-06	1.45E-05
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2	9.61E-06	9.61E-06	8.65E-05
3	4.3E-05	6.21E-05	0.000143
4	6.13E-05	4.72E-05	0.000109
5	1.88E-05	2.35E-05	5.17E-05
6	7.51E-05	5.63E-05	9.39E-05
7	3.28E-05	4.68E-05	6.09E-05
8	7.47E-05	1.87E-05	3.27E-05
9	2.78E-05	5.56E-05	0.000107
10	1.39E-05	1.85E-05	8.35E-05
11	1.39E-05	2.77E-05	1.85E-05
12	0	1.39E-05	5.08E-05
13	1.37E-05	1.37E-05	4.12E-05
14	4.58E-05	1.37E-05	6.41E-05
15	0	1.37E-05	9.12E-06
16	6.78E-05	0.000276	0.000339
17	2.68E-05	2.68E-05	7.59E-05
18	4.9E-05	2.67E-05	8.91E-05
19	2.23E-05	1.34E-05	7.57E-05
20	4.45E-06	2.67E-05	2.23E-05
21	3.1E-05	3.54E-05	6.19E-05
22	1.32E-05	1.32E-05	7.9E-05
23	5.25E-05	0.000101	0.000149
24	3.49E-05	4.37E-05	6.12E-05
25	4.36E-05	5.66E-05	9.59E-05
26	5.22E-05	2.17E-05	7.83E-05
27	2.58E-05	1.29E-05	2.15E-05
28	2.15E-05	4.29E-06	3E-05
29	2.13E-05	8.51E-06	2.55E-05
30	4.63E-05	4.63E-05	0.000118
31	4.2E-06	8.4E-06	6.3E-05
32	2.08E-05	3.75E-05	8.33E-05
33	8.32E-06	3.74E-05	8.32E-05
34	1.25E-05	1.25E-05	3.33E-05
35	6.22E-05	5.81E-05	8.29E-05
36	4.56E-05	4.14E-05	5.39E-05
37	2.04E-05	1.63E-05	4.07E-05
38	2.04E-05	4.07E-06	8.15E-06
39	3.63E-05	4.04E-05	0.000101
40	6.82E-05	3.61E-05	7.22E-05
41	2.41E-05	4.41E-05	8.02E-05
42	3.2E-05	3.2E-05	4.4E-05
43	0	3.99E-06	2.39E-05
44	0	4.78E-05	9.56E-05
45	3.98E-06	2.79E-05	3.58E-05
46	0	2.76E-05	3.94E-05
47	1.94E-05	1.17E-05	1.17E-05
48	7.64E-06	2.29E-05	7.26E-05
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2	2.65E-05	1.89E-05	3.41E-05
3	3.71E-05	4.45E-05	6.68E-05
4	2.59E-05	3.33E-05	5.91E-05
5	5.9E-05	0.000232	0.000284
6	7.25E-06	2.18E-05	6.53E-05
7	1.76E-05	6.33E-05	9.5E-05
8	1.38E-05	2.42E-05	1.73E-05
9	1.38E-05	1.03E-05	3.79E-05
10	3.77E-05	5.14E-05	7.2E-05
11	1.01E-05	2.02E-05	5.73E-05
12	3.68E-05	3.68E-05	5.69E-05
13	1.34E-05	4.35E-05	9.7E-05
14	4.27E-05	8.53E-05	6.56E-05
15	2.3E-05	4.59E-05	7.54E-05
16	1.97E-05	1.97E-05	9.83E-05
17	3.55E-05	4.52E-05	7.1E-05
18	1.59E-05	9.53E-06	4.45E-05
19	4.12E-05	3.17E-05	6.65E-05
20	6.25E-06	6.25E-06	9.38E-06
21	0	3.12E-06	6.24E-06
22	9.11E-06	9.11E-06	7.29E-05
23	1.82E-05	2.43E-05	2.73E-05
24	9.07E-05	0.000109	0.000233
25	2.08E-05	2.38E-05	3.56E-05
26	1.78E-05	2.07E-05	4.15E-05
27	2.92E-05	3.22E-05	7.6E-05
28	2.53E-05	3.37E-05	5.62E-05
29	2.24E-05	5.59E-05	8.39E-05
30	2.52E-05	1.68E-05	7.27E-05
31	1.39E-05	2.51E-05	3.63E-05
32	3.34E-05	2.78E-06	0
33	2.77E-06	1.39E-05	2.5E-05
34	2.75E-05	3.84E-05	8.24E-05
35	5.41E-06	5.41E-06	3.52E-05
36	0	8.08E-06	2.69E-05
37	1.07E-05	2.69E-06	2.69E-06
38	0	2.68E-06	1.34E-05
39	2.14E-05	2.41E-05	6.68E-05
40	5.82E-05	5.29E-05	0.000135
41	2.63E-06	2.63E-06	5.26E-06
42	1.31E-05	2.09E-05	4.71E-05
43	7.81E-06	5.2E-06	4.16E-05
44	1.81E-05	4.39E-05	0.000103
45	7.75E-06	7.75E-06	2.58E-05
46	2.31E-05	1.8E-05	4.36E-05
47	1.02E-05	2.29E-05	0.000122
48	7.61E-06	1.52E-05	3.3E-05
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2	7.5E-06	1.5E-05	1.75E-05
3	9.88E-06	4.94E-06	2.47E-05
4	3.41E-05	3.17E-05	4.88E-05
5	9.73E-06	2.19E-05	3.16E-05
6	9.68E-06	4.84E-05	1.69E-05
7	2.17E-05	1.69E-05	2.9E-05
8	4.76E-06	7.15E-06	1.19E-05
9	1.17E-05	7.01E-06	1.4E-05
10	0	6.99E-06	1.17E-05
11	6.99E-06	2.33E-06	2.33E-05
12	1.37E-05	3.43E-05	8.23E-05
13	0	2.27E-06	4.54E-06
14	9.01E-06	2.03E-05	6.08E-05
15	8.62E-06	6.47E-06	1.51E-05
16	1.69E-05	1.9E-05	1.69E-05
17	1.05E-05	2.73E-05	7.77E-05
18	8.2E-06	1.02E-05	1.43E-05
19	2.05E-06	2.05E-06	2.45E-05
20	1.2E-05	1.2E-05	3.8E-05
21	7.98E-06	1.99E-05	7.98E-05
22	3.96E-06	3.96E-06	7.92E-06
23	1.38E-05	1.78E-05	2.17E-05
24	1.96E-06	7.83E-06	3.53E-05
25	2.13E-05	1.36E-05	4.07E-05
26	1.53E-05	1.92E-06	3.84E-06
27	7.63E-06	1.34E-05	4.58E-05
28	0	0	1.89E-06
29	3.78E-06	9.46E-06	1.7E-05
30	7.53E-06	1.13E-05	3.76E-06
31	3.37E-05	3.19E-05	6.74E-05
32	3.69E-06	9.22E-06	3.51E-05
33	5.24E-06	1.4E-05	4.02E-05
34	3.47E-06	1.04E-05	2.43E-05
35	8.07E-06	0	9.68E-06
36	1.28E-05	2.08E-05	5.28E-05
37	1.1E-05	2.35E-05	2.82E-05
38	7.69E-06	9.23E-06	1.85E-05
39	0	4.46E-06	8.93E-06
40	5.93E-06	7.42E-06	2.08E-05
41	4.37E-06	1.02E-05	1.6E-05
42	8.24E-06	1.65E-05	1.24E-05
43	1.29E-06	9.04E-06	1.81E-05
44	3.86E-06	1.29E-05	2.44E-05
45	6.41E-06	3.84E-06	3.84E-06
46	1.41E-05	1.02E-05	2.56E-05
47	0	7.65E-06	1.66E-05
48	1.27E-06	2.55E-06	1.27E-05
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2	1.5E-05	2.5E-06	3.13E-05
3	8.58E-06	1.1E-05	2.45E-05
4	2.42E-06	6.06E-06	1.09E-05
5	7.12E-06	1.19E-06	4.75E-06
6	7.85E-06	1.68E-05	2.13E-05
7	1.11E-06	1.11E-06	1.11E-05
8	0	2.22E-06	9.98E-06
9	9.73E-06	3.24E-06	2.27E-05
10	2.16E-06	3.23E-06	7.55E-06
11	1.07E-05	7.48E-06	2.46E-05
12	0	8.55E-06	1.92E-05
13	1.17E-05	9.59E-06	7.46E-06
14	7.36E-06	1.37E-05	1.68E-05
15	2.05E-06	2.05E-06	5.13E-06
16	3.05E-06	6.11E-06	1.63E-05
17	2.03E-06	1.52E-05	7.1E-06
18	1.31E-05	1.61E-05	4.03E-05
19	8.02E-06	1.2E-05	1.4E-05
20	4.96E-06	1.49E-05	1.29E-05
21	1.15E-05	9.57E-06	2.49E-05
22	1.14E-05	2.29E-05	3.24E-05
23	0	1.87E-06	4.67E-06
24	8.34E-06	1.39E-05	1.11E-05
25	2.76E-06	3.67E-06	6.43E-06
26	1.8E-06	8.98E-06	7.19E-06
27	4.26E-06	7.66E-06	1.7E-05
28	2.38E-06	3.18E-06	8.74E-06
29	1.09E-05	7.01E-06	1.17E-05
30	1.53E-06	1.53E-06	8.43E-06
31	3.78E-06	7.56E-06	9.83E-06
32	4.5E-06	1.27E-05	1.5E-05
33	3.74E-06	1.5E-06	9.73E-06
34	8.69E-06	1.3E-05	1.45E-05
35	0	7.21E-07	2.16E-06
36	3.38E-06	3.38E-06	4.73E-06
37	2.64E-06	6.6E-07	2.64E-06
38	3.78E-06	4.41E-06	1.32E-05
39	4.69E-06	9.37E-06	8.79E-06
40	5.74E-07	1.15E-06	1.72E-06
41	4.47E-06	6.14E-06	1.01E-05
42	1.21E-05	6.05E-06	1.16E-05
43	1.57E-06	5.76E-06	9.42E-06
44	9.17E-06	1.53E-05	3.36E-05
45	5.04E-07	1.01E-06	3.03E-06
46	5.81E-06	3.87E-06	7.75E-06
47	2.28E-06	1.37E-06	1.83E-06
48	2.09E-06	5.86E-06	1.21E-05
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2	4.56E-06	1.24E-06	5.8E-06
3	3.61E-06	2.4E-06	4.01E-06
4	2.16E-06	6.47E-06	7.55E-06
5	1.7E-06	3.75E-06	3.75E-06
6	1.01E-06	6.7E-07	0
7	0	9.5E-07	1.9E-06
8	0	1.56E-06	5E-06
9	1.2E-06	1.81E-06	2.11E-06
10	1.37E-06	1.92E-06	5.2E-06
11	2.25E-06	1.75E-06	3.5E-06
12	3.1E-06	3.32E-06	5.53E-06
13	1.86E-06	2.48E-06	6.83E-06
14	6.06E-07	6.06E-07	1.62E-06
15	1.93E-07	1.93E-07	5.79E-07
16	1.77E-07	2.12E-06	1.77E-06
17	3.5E-07	1.75E-07	1.93E-06
18	1.62E-06	1.29E-06	3.23E-06
19	1.13E-06	1.61E-06	2.73E-06
20	4.93E-07	6.03E-07	6.57E-07
21	0	0	0
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relHis	relArg	relative ab	Abundance	ORF	Protein
		0.004399	1759.88	YDR297W	Sur2p
		0.012386	4955.42	YMR272C	Scs7p
		0.027303	10923.4	YGL055W	Ole1p
		0.000438	175.347	YHR001W	Respiratory chain complex III
		0.004278	1711.73	YJR048W	Cyc1p
		0.001934	773.901	YEL039C	Cyc7p
		0.035203	14084.1	YMR015C	Erg5p
		0.002792	1116.89	YGR088W	Ctt1p
		0.002106	842.722	YDR256C	Cta1p
		0.034715	13888.6	YHR007C	Erg11p
		7.97E-05	31.891	Q0275	Respiratory chain complex IV
		0.001877	750.816	YJR078W	Bna2p
		Exclude, nc		YDR402C	Dit2p
		0.002963	1185.4	YLR214W	Fre1p
		Exclude, nc		YKL220C	Fre2p
		0.001118	447.489	YLL051C	Fre6p
		7.49E-05	29.971	YOR384W	Fre5p
		Exclude, nc		YOR381W	Fre3p
		Exclude, nc		YNR060W	Fre4p
		0.022675	9071.99	YJR137C	Met5p+Met10p
		0.002908	1163.63	YML054C	Cyb2p
		0.020763	8306.91	YKR066C	Ccp1p
		0.001012	405.011	YDR178W	Respiratory chain complex II
		0.114312	45734.1	YGL009C	Leu1p
		Exclude, nc		YGDR234W	Lys4p
		0.037108	14846.3	YLR304C	Aco1p
		0.107391	42964.9	YJR016C	Ilv3p
		0.164869	65960.7	YDL171C	Glt1p
		0.022675	9071.99	YJR137C	Met5p
		0.008556	3423.06	YGL091C	Nbp35p
		8.5E-05	34.013	YNL204C	Nar1p
		0.004503	1801.58	YLL041C	Sdh2p
	0.038852	0.019426	7771.98	YGR286C	Bio2p
0.007629		0.003815	1526.13	YEL024W	Rip1p
		0.00491	1964.41	YPL252C	Yah1p
		0.007992	3197.62	YPL170W	Dap1p
0.005695		0.005695	2278.49	YNL234W	YNL234w
0.000491		0.000491	196.604	YLR205C	YLR205c
		0.004241	1696.6	YPL059W	Grx5p
		0.001135	454.255	YPL135W	Isu1p
		Exclude, nc		YOR266C	Isu2p
		0.004719	1888.14	YBR213W	Met8p
		0.031649	12662.2	YJL200C	Aco2p
		0.032607	13045.5	YPL086C	Elp3p
		0.014027	5611.73	YKL040C	Nfu1p

1				
2	0.001022	408.696	YOL043C	Ntg2p
3	0.010704	4282.44	YKL045W	Pri2p
4	0.025397	10160.7	YER171W	Rad3p
5	0.035921	14371.2	YPL207W	Tyw1p
6				
7	0.01013	4052.79	YOR196C	Lip5p
8	0.0754	30166.2	YDR091C	Rli1p
9	0.009268	3707.95	YNL111C	Cyb5p
10	0.003904	1561.84	YAL039C	Cyc3p
11	0.003524	1409.98	YKL087C	Cyt2p
12				
13	0.005851	2340.73	YLR256W	Hap1p
14	0.003915	1566.5	YMR073C	Irc21p
15	0.045729	18295.3	YGR234W	Yhb1p
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rules:

FeIII mononuclear	4 Cys
haem a/c - ferrohaem b	1 Cys
sirohaem	1 Cys
4Fe-4S/3Fe-4S	2 Cys
2Fe-2S (non rieske)	4 Cys
2Fe-2S (rieske)	2 His + 2 Cys
4Fe-4S (biotin biosynthase)	2 Arg

for proteins with subunits, the abundance of the protein complex = that of the subunit with the lowest abundance if the subunit with the lowest abundance is not a permanent number and can be replaced with

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4	r_0002	0	r_0002	0	0
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12	r_0013	0	r_0013	0	0
13	r_0014	8.71E-05	r_0014	8.71E-05	0
14	r_0015	8.71E-05	r_0015	8.71E-05	0
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18	r_0018	0.02518	r_0018	0.02518	0
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47	r_0045	0.015124	r_0045	0.015124	0
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52	r_0061	0.026077	r_0061	0.026077	0
53	r_0062	0	r_0062	0	0
54	r_0063	0	r_0063	0	0

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3	r_0065	0.038377	r_0065	0.038377
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5	r_0067	0	r_0067	0
6	r_0068	0	r_0068	0
7	r_0069	0	r_0069	0
8	r_0070	0	r_0070	0
9	r_0070	0	r_0070	0
10	r_0072	0	r_0072	0
11	r_0073	0	r_0073	0
12	r_0073	0	r_0073	0
13	r_0074	0	r_0074	0
14	r_0075	0	r_0075	0
15	r_0076	0	r_0076	0
16	r_0077	0	r_0077	0
17	r_0078	0	r_0078	0
18	r_0078	0	r_0078	0
19	r_0079	0.023833	r_0079	0.023833
20	r_0080	0.006194	r_0080	0.006194
21	r_0081	7.04E-07	r_0081	7.04E-07
22	r_0082	0	r_0082	0
23	r_0083	0	r_0083	0
24	r_0083	0	r_0083	0
25	r_0084	0	r_0084	0
26	r_0085	0	r_0085	0
27	r_0086	0	r_0086	0
28	r_0087	0	r_0087	0
29	r_0088	0	r_0088	0
30	r_0088	0	r_0088	0
31	r_0089	0	r_0089	0
32	r_0090	0	r_0090	0
33	r_0091	0.029945	r_0091	0.029945
34	r_0092	0	r_0092	0
35	r_0093	0	r_0093	0
36	r_0093	0	r_0093	0
37	r_0094	0	r_0094	0
38	r_0095	0	r_0095	0
39	r_0096	0.049357	r_0096	0.049357
40	r_0097	0.049357	r_0097	0.049357
41	r_0097	0.049357	r_0097	0.049357
42	r_0099	0	r_0099	0
43	r_0100	0	r_0100	0
44	r_0101	0	r_0101	0
45	r_0102	0	r_0102	0
46	r_0103	0	r_0103	0
47	r_0103	0	r_0103	0
48	r_0104	0.003616	r_0104	0.003616
49	r_0105	0	r_0105	0
50	r_0106	0	r_0106	0
51	r_0107	0	r_0107	0
52	r_0108	0	r_0108	0
53	r_0108	0	r_0108	0
54	r_0109	0.01403	r_0109	0.01403
55	r_0111	0	r_0111	0
56	r_0112	0.021043	r_0112	0.021043
57	r_0113	0	r_0113	0
58	r_0113	0	r_0113	0
59				
60				

1				
2	r_0114	0 r_0114	0	0
3	r_0115	0.028629 r_0115	0.028629	0
4	r_0116	0 r_0116	0	0
5	r_0117	0 r_0117	0	0
6				
7	r_0118	0.028629 r_0118	0.028629	0
8	r_0119	0 r_0119	0	0
9	r_0120	0 r_0120	0	0
10	r_0121	0 r_0121	0	0
11	r_0122	0 r_0122	0	0
12	r_0123	0 r_0123	0	0
13	r_0124	0 r_0124	0	0
14	r_0125	0 r_0125	0	0
15	r_0126	0 r_0126	0	0
16				
17	r_0127	7.14E-05 r_0127	7.14E-05	0
18	r_0128	0 r_0128	0	0
19	r_0129	0 r_0129	0	0
20	r_0130	0 r_0130	0	0
21	r_0131	0 r_0131	0	0
22	r_0132	0 r_0132	0	0
23	r_0133	0 r_0133	0	0
24	r_0134	0 r_0134	0	0
25	r_0135	0 r_0135	0	0
26	r_0137	0 r_0137	0	0
27	r_0138	0 r_0138	0	0
28	r_0139	0 r_0139	0	0
29	r_0140	0 r_0140	0	0
30				
31	r_0142	0.001734 r_0142	0.001734	0
32	r_0143	0 r_0143	0	0
33	r_0144	0.001734 r_0144	0.001734	0
34	r_0145	0 r_0145	0	0
35	r_0146	0 r_0146	0	0
36	r_0147	0 r_0147	0	0
37				
38	r_0148	0.513162 r_0148	0.513162	0
39	r_0149	0 r_0149	0	0
40	r_0150	0 r_0150	0	0
41	r_0151	0.023833 r_0151	0.023833	0
42	r_0152	0.025321 r_0152	0.025321	0
43	r_0153	0.025321 r_0153	0.025321	0
44	r_0154	0.005041 r_0154	0.005041	0
45	r_0155	0 r_0155	0	0
46	r_0156	0 r_0156	0	0
47	r_0157	0.040365 r_0157	0.040365	0
48	r_0158	0 r_0158	0	0
49	r_0159	0 r_0159	0	0
50	r_0160	0 r_0160	0	0
51	r_0161	0 r_0161	0	0
52	r_0162	0 r_0162	0	0
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1				
2	r_0163	1000	r_0163	1000
3	r_0164	0	r_0164	0
4	r_0165	1000	r_0165	1000
5	r_0166	0	r_0166	0
6	r_0167	0	r_0167	0
7	r_0168	0	r_0168	0
8	r_0169	0	r_0169	0
9	r_0170	0	r_0170	0
10	r_0171	0	r_0171	0
11	r_0172	0	r_0172	0
12	r_0173	0.016002	r_0173	0.016002
13	r_0174	0	r_0174	0
14	r_0175	0	r_0175	0
15	r_0176	0	r_0176	0
16	r_0177	0	r_0177	0
17	r_0178	0	r_0178	0
18	r_0179	0	r_0179	0
19	r_0180	0	r_0180	0
20	r_0181	0	r_0181	0
21	r_0182	0	r_0182	0
22	r_0183	0	r_0183	0
23	r_0184	0	r_0184	0
24	r_0185	0	r_0185	0
25	r_0186	0	r_0186	0
26	r_0187	0	r_0187	0
27	r_0188	0	r_0188	0
28	r_0189	0	r_0189	0
29	r_0190	0	r_0190	0
30	r_0191	0	r_0191	0
31	r_0192	0	r_0192	0
32	r_0193	0	r_0193	0
33	r_0194	0	r_0194	0
34	r_0195	0.002059	r_0195	0.002059
35	r_0198	0	r_0198	0
36	r_0199	0	r_0199	0
37	r_0200	0	r_0200	0
38	r_0201	0	r_0201	0
39	r_0202	0.017622	r_0202	0.017622
40	r_0203	0.017622	r_0203	0.017622
41	r_0204	0	r_0204	0
42	r_0205	0	r_0205	0
43	r_0206	0	r_0206	0
44	r_0207	0.014138	r_0207	0.014138
45	r_0208	0.014138	r_0208	0.014138
46	r_0209	0.014138	r_0209	0.014138
47	r_0210	0	r_0210	0
48	r_0211	0.008948	r_0211	0.008948
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2	r_0212	0.008948	r_0212	0.008948
3	r_0213	0	r_0213	0
4	r_0214	0.009731	r_0214	0.009731
5	r_0215	0.038254	r_0215	0.038254
6	r_0216	999.7203	r_0216	999.7203
7	r_0217	999.8667	r_0217	999.8667
8	r_0218	0	r_0218	0
9	r_0219	0.038254	r_0219	0.038254
10	r_0220	0.026174	r_0220	0.026174
11	r_0221	0	r_0221	0
12	r_0222	0	r_0222	0
13	r_0223	0	r_0223	0
14	r_0224	0	r_0224	0
15	r_0225	0.005833	r_0225	0.005833
16	r_0226	6.071165	r_0226	6.071165
17	r_0227	0	r_0227	0
18	r_0228	0	r_0228	0
19	r_0229	0	r_0229	0
20	r_0230	0	r_0230	0
21	r_0231	0.0006	r_0231	0.0006
22	r_0233	0	r_0233	0
23	r_0234	0.000595	r_0234	0.000595
24	r_0235	0.000595	r_0235	0.000595
25	r_0236	0.000595	r_0236	0.000595
26	r_0237	0.000595	r_0237	0.000595
27	r_0238	0.000595	r_0238	0.000595
28	r_0239	0.000595	r_0239	0.000595
29	r_0240	0.000595	r_0240	0.000595
30	r_0241	0.000595	r_0241	0.000595
31	r_0242	0	r_0242	0
32	r_0243	8.45E-06	r_0243	8.45E-06
33	r_0244	0.000564	r_0244	0.000564
34	r_0249	0	r_0249	0
35	r_0250	0.023869	r_0250	0.023869
36	r_0252	0	r_0252	0
37	r_0253	0	r_0253	0
38	r_0254	0	r_0254	0
39	r_0255	0	r_0255	0
40	r_0256	0	r_0256	0
41	r_0259	0	r_0259	0
42	r_0260	0	r_0260	0
43	r_0261	0	r_0261	0
44	r_0262	0	r_0262	0
45	r_0263	0	r_0263	0
46	r_0264	0	r_0264	0
47	r_0265	0	r_0265	0
48	r_0266	0	r_0266	0
49				
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2	r_0267	0 r_0267	0	0
3	r_0268	0 r_0268	0	0
4	r_0269	0 r_0269	0	0
5	r_0270	0 r_0270	0	0
6	r_0271	0 r_0271	0	0
7	r_0272	8.80E-08 r_0272	8.80E-08	0
8	r_0273	0 r_0273	0	0
9	r_0274	0 r_0274	0	0
10	r_0278	0.020755 r_0278	0.020755	0
11	r_0279	0.038377 r_0279	0.038377	0
12	r_0280	-999.905 r_0280	-999.905	0
13	r_0281	0 r_0281	0	0
14	r_0282	0 r_0282	0	0
15	r_0283	0 r_0283	0	0
16	r_0284	0 r_0284	0	0
17	r_0285	0 r_0285	0	0
18	r_0286	0 r_0286	0	0
19	r_0287	0 r_0287	0	0
20	r_0288	0 r_0288	0	0
21	r_0289	0 r_0289	0	0
22	r_0290	0 r_0290	0	0
23	r_0291	0 r_0291	0	0
24	r_0292	0 r_0292	0	0
25	r_0293	0 r_0293	0	0
26	r_0294	0 r_0294	0	0
27	r_0295	0 r_0295	0	0
28	r_0296	0 r_0296	0	0
29	r_0297	0 r_0297	0	0
30	r_0298	0 r_0298	0	0
31	r_0299	0 r_0299	0	0
32	r_0300	0.089635 r_0300	0.089635	0
33	r_0301	0 r_0301	0	0
34	r_0302	-999.905 r_0302	-999.905	0
35	r_0303	999.9947 r_0303	999.9947	0
36	r_0304	8.80E-08 r_0304	8.80E-08	0
37	r_0306	0 r_0306	0	0
38	r_0307	0.004426 r_0307	0.004426	0
39	r_0308	0 r_0308	0	0
40	r_0309	0.000581 r_0309	0.000581	0
41	r_0310	0.000581 r_0310	0.000581	0
42	r_0311	0 r_0311	0	0
43	r_0312	0 r_0312	0	0
44	r_0313	0.000581 r_0313	0.000581	0
45	r_0314	0 r_0314	0	0
46	r_0315	0 r_0315	0	0
47	r_0317	0.0006 r_0317	0.0006	0
48	r_0318	0 r_0318	0	0
49				
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1				
2	r_0319	0 r_0319	0	0
3	r_0320	0 r_0320	0	0
4	r_0321	0 r_0321	0	0
5	r_0322	0 r_0322	0	0
6	r_0323	0 r_0323	0	0
7	r_0326	0.000282 r_0326	0.000282	0
9	r_0327	0 r_0327	0	0
10	r_0328	0 r_0328	0	0
11	r_0329	0 r_0329	0	0
12	r_0330	-0.00021 r_0330	-0.00021	0
13	r_0331	0 r_0331	0	0
14	r_0332	0 r_0332	0	0
15	r_0334	0 r_0334	0	0
16	r_0335	0 r_0335	0	0
17	r_0340	3.79E-05 r_0340	3.79E-05	0
18	r_0341	0 r_0341	0	0
19	r_0342	0 r_0342	0	0
20	r_0343	0 r_0343	0	0
21	r_0344	0.000317 r_0344	0.000317	0
22	r_0345	0 r_0345	0	0
23	r_0346	0 r_0346	0	0
24	r_0347	0 r_0347	0	0
25	r_0348	0 r_0348	0	0
26	r_0349	-0.00973 r_0349	-0.00973	0
27	r_0350	0 r_0350	0	0
28	r_0351	0 r_0351	0	0
29	r_0352	0.049357 r_0352	0.049357	0
30	r_0353	0.016954 r_0353	0.016954	0
31	r_0354	0 r_0354	0	0
32	r_0355	0.001205 r_0355	0.001205	0
33	r_0356	0 r_0356	0	0
34	r_0357	0 r_0357	0	0
35	r_0358	0 r_0358	0	0
36	r_0359	0 r_0359	0	0
37	r_0360	0 r_0360	0	0
38	r_0361	0.071079 r_0361	0.071079	0
39	r_0362	0.071079 r_0362	0.071079	0
40	r_0363	0 r_0363	0	0
41	r_0364	3.44E-05 r_0364	3.44E-05	0
42	r_0365	0 r_0365	0	0
43	r_0366	0.540524 r_0366	0.540524	0
44	r_0368	0 r_0368	0	0
45	r_0369	0 r_0369	0	0
46	r_0370	0 r_0370	0	0
47	r_0373	0 r_0373	0	0
48	r_0399	0 r_0399	0	0
49	r_0400	0 r_0400	0	0

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2	r_0402	0	r_0402	0
3	r_0410	0	r_0410	0
4	r_0412	0	r_0412	0
5	r_0436	8.80E-08	r_0436	8.80E-08
6	r_0437	0	r_0437	0
7	r_0438	1.909946	r_0438	1.909946
8	r_0439	3.819891	r_0439	3.819891
9	r_0440	0	r_0440	0
10	r_0441	0	r_0441	0
11	r_0442	0	r_0442	0
12	r_0443	0	r_0443	0
13	r_0445	1.142322	r_0445	1.142322
14	r_0446	-1.12634	r_0446	-1.12634
15	r_0447	0	r_0447	0
16	r_0448	0	r_0448	0
17	r_0449	0	r_0449	0
18	r_0450	0	r_0450	0
19	r_0451	0	r_0451	0
20	r_0452	0.063292	r_0452	0.063292
21	r_0453	0.009731	r_0453	0.009731
22	r_0454	0	r_0454	0
23	r_0455	0	r_0455	0
24	r_0457	0	r_0457	0
25	r_0458	0	r_0458	0
26	r_0459	1000	r_0459	1000
27	r_0460	0	r_0460	0
28	r_0461	0	r_0461	0
29	r_0462	0.001205	r_0462	0.001205
30	r_0463	0	r_0463	0
31	r_0464	0	r_0464	0
32	r_0465	0	r_0465	0
33	r_0466	0.029945	r_0466	0.029945
34	r_0467	0.720357	r_0467	0.720357
35	r_0468	0	r_0468	0
36	r_0469	0	r_0469	0
37	r_0470	0	r_0470	0
38	r_0471	1.046435	r_0471	1.046435
39	r_0472	0	r_0472	0
40	r_0473	0	r_0473	0
41	r_0475	0	r_0475	0
42	r_0476	0.13268	r_0476	0.13268
43	r_0477	8.80E-08	r_0477	8.80E-08
44	r_0478	0.009273	r_0478	0.009273
45	r_0479	0.026552	r_0479	0.026552
46	r_0480	0	r_0480	0
47	r_0481	0	r_0481	0
48	r_0482	0	r_0482	0
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2	r_0483	0 r_0483	0	0
3	r_0484	0 r_0484	0	0
4	r_0485	0 r_0485	0	0
5	r_0486	1.193469 r_0486	1.193469	0
6	r_0487	0 r_0487	0	0
7	r_0488	0 r_0488	0	0
8	r_0489	0 r_0489	0	0
9	r_0490	0 r_0490	0	0
10	r_0491	0.000843 r_0491	0.000843	0
11	r_0492	0 r_0492	0	0
12	r_0497	0 r_0497	0	0
13	r_0499	0.023833 r_0499	0.023833	0
14	r_0500	0 r_0500	0	0
15	r_0501	0 r_0501	0	0
16	r_0502	1.186348 r_0502	1.186348	0
17	r_0503	-0.56848 r_0503	-0.56848	0
18	r_0504	0 r_0504	0	0
19	r_0505	7.04E-07 r_0505	7.04E-07	0
20	r_0506	0.568482 r_0506	0.568482	0
21	r_0507	0.568482 r_0507	0.568482	0
22	r_0508	0.568482 r_0508	0.568482	0
23	r_0509	0 r_0509	0	0
24	r_0510	0.045618 r_0510	0.045618	0
25	r_0511	0 r_0511	0	0
26	r_0512	0.025549 r_0512	0.025549	0
27	r_0514	0.004345 r_0514	0.004345	0
28	r_0518	0 r_0518	0	0
29	r_0519	0 r_0519	0	0
30	r_0520	0 r_0520	0	0
31	r_0521	0 r_0521	0	0
32	r_0522	0 r_0522	0	0
33	r_0523	0 r_0523	0	0
34	r_0524	0 r_0524	0	0
35	r_0525	8.71E-05 r_0525	8.71E-05	0
36	r_0526	0 r_0526	0	0
37	r_0527	0 r_0527	0	0
38	r_0528	0.000298 r_0528	0.000298	0
39	r_0529	0 r_0529	0	0
40	r_0530	8.80E-08 r_0530	8.80E-08	0
41	r_0531	8.80E-08 r_0531	8.80E-08	0
42	r_0532	0 r_0532	0	0
43	r_0533	0 r_0533	0	0
44	r_0534	1 r_0534	1	0
45	r_0535	0 r_0535	0	0
46	r_0536	0.005833 r_0536	0.005833	0
47	r_0537	0.005833 r_0537	0.005833	0
48	r_0538	0.005833 r_0538	0.005833	0
49				
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2	r_0539	0.005833	r_0539	0.005833
3	r_0540	0	r_0540	0
4	r_0541	0	r_0541	0
5	r_0542	0.02518	r_0542	0.02518
6	r_0543	0	r_0543	0
7	r_0544	0	r_0544	0
8	r_0545	0.02518	r_0545	0.02518
9	r_0546	0.038254	r_0546	0.038254
10	r_0547	0	r_0547	0
11	r_0548	0.033213	r_0548	0.033213
12	r_0549	0.005041	r_0549	0.005041
13	r_0550	0	r_0550	0
14	r_0551	0	r_0551	0
15	r_0552	0	r_0552	0
16	r_0553	0	r_0553	0
17	r_0554	0	r_0554	0
18	r_0555	0	r_0555	0
19	r_0556	0	r_0556	0
20	r_0557	8.80E-08	r_0557	8.80E-08
21	r_0558	0.003616	r_0558	0.003616
22	r_0559	0	r_0559	0
23	r_0560	0.003616	r_0560	0.003616
24	r_0561	0	r_0561	0
25	r_0562	0	r_0562	0
26	r_0563	0.005833	r_0563	0.005833
27	r_0564	0.005833	r_0564	0.005833
28	r_0565	0.004345	r_0565	0.004345
29	r_0566	0.017622	r_0566	0.017622
30	r_0567	0	r_0567	0
31	r_0568	0	r_0568	0
32	r_0569	0.830825	r_0569	0.830825
33	r_0570	0.029666	r_0570	0.029666
34	r_0571	0	r_0571	0
35	r_0572	0	r_0572	0
36	r_0573	0	r_0573	0
37	r_0574	0	r_0574	0
38	r_0575	0	r_0575	0
39	r_0596	0	r_0596	0
40	r_0597	0	r_0597	0
41	r_0598	0	r_0598	0
42	r_0599	0	r_0599	0
43	r_0600	0	r_0600	0
44	r_0601	0	r_0601	0
45	r_0602	0	r_0602	0
46	r_0603	0	r_0603	0
47	r_0604	0	r_0604	0
48	r_0605	0	r_0605	0
49				
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1				
2	r_0606	0 r_0606	0	0
3	r_0607	0 r_0607	0	0
4	r_0608	0 r_0608	0	0
5	r_0609	0 r_0609	0	0
6	r_0610	0 r_0610	0	0
7	r_0611	0 r_0611	0	0
8	r_0612	0 r_0612	0	0
9	r_0613	0 r_0613	0	0
10	r_0614	0 r_0614	0	0
11	r_0615	0 r_0615	0	0
12	r_0616	0 r_0616	0	0
13	r_0617	0 r_0617	0	0
14	r_0618	0 r_0618	0	0
15	r_0619	0 r_0619	0	0
16	r_0620	0 r_0620	0	0
17	r_0621	0 r_0621	0	0
18	r_0622	0 r_0622	0	0
19	r_0623	0 r_0623	0	0
20	r_0624	0 r_0624	0	0
21	r_0625	0 r_0625	0	0
22	r_0626	0 r_0626	0	0
23	r_0627	0 r_0627	0	0
24	r_0628	0 r_0628	0	0
25	r_0629	0 r_0629	0	0
26	r_0630	0 r_0630	0	0
27	r_0631	0 r_0631	0	0
28	r_0632	0 r_0632	0	0
29	r_0633	0 r_0633	0	0
30	r_0634	0 r_0634	0	0
31	r_0635	0 r_0635	0	0
32	r_0636	0 r_0636	0	0
33	r_0637	0 r_0637	0	0
34	r_0638	0 r_0638	0	0
35	r_0639	0 r_0639	0	0
36	r_0640	0 r_0640	0	0
37	r_0641	0 r_0641	0	0
38	r_0642	0 r_0642	0	0
39	r_0643	0 r_0643	0	0
40	r_0644	0 r_0644	0	0
41	r_0645	0 r_0645	0	0
42	r_0646	0 r_0646	0	0
43	r_0647	0 r_0647	0	0
44	r_0648	0 r_0648	0	0
45	r_0649	0 r_0649	0	0
46	r_0650	0 r_0650	0	0
47	r_0651	0 r_0651	0	0
48	r_0652	0 r_0652	0	0
49				
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1				
2	r_0653	0 r_0653	0	0
3	r_0654	0 r_0654	0	0
4	r_0655	0 r_0655	0	0
5	r_0656	0 r_0656	0	0
6	r_0657	0 r_0657	0	0
7	r_0658	0 r_0658	0	0
8	r_0659	-0.0053 r_0659	-0.0053	0
9	r_0661	0 r_0661	0	0
10	r_0662	0 r_0662	0	0
11	r_0663	-0.01695 r_0663	-0.01695	0
12	r_0664	0 r_0664	0	0
13	r_0665	0.016954 r_0665	0.016954	0
14	r_0666	0 r_0666	0	0
15	r_0667	0.001205 r_0667	0.001205	0
16	r_0668	0 r_0668	0	0
17	r_0669	0.016954 r_0669	0.016954	0
18	r_0670	0 r_0670	0	0
19	r_0671	0.015124 r_0671	0.015124	0
20	r_0672	0 r_0672	0	0
21	r_0673	0 r_0673	0	0
22	r_0674	0 r_0674	0	0
23	r_0675	0 r_0675	0	0
24	r_0676	0 r_0676	0	0
25	r_0678	0.02518 r_0678	0.02518	0
26	r_0679	0 r_0679	0	0
27	r_0680	0 r_0680	0	0
28	r_0681	0 r_0681	0	0
29	r_0682	0 r_0682	0	0
30	r_0683	0 r_0683	0	0
31	r_0687	0 r_0687	0	0
32	r_0688	0 r_0688	0	0
33	r_0689	0 r_0689	0	0
34	r_0690	0 r_0690	0	0
35	r_0691	0 r_0691	0	0
36	r_0692	0 r_0692	0	0
37	r_0693	0.016373 r_0693	0.016373	0
38	r_0694	0.015124 r_0694	0.015124	0
39	r_0695	0 r_0695	0	0
40	r_0696	0 r_0696	0	0
41	r_0697	0 r_0697	0	0
42	r_0698	0.000603 r_0698	0.000603	0
43	r_0699	999.9604 r_0699	999.9604	0
44	r_0700	-999.986 r_0700	-999.986	0
45	r_0701	0.026077 r_0701	0.026077	0
46	r_0702	0 r_0702	0	0
47	r_0703	0 r_0703	0	0
48	r_0704	0 r_0704	0	0
49				
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2	r_0705	0 r_0705	0	0
3	r_0706	0 r_0706	0	0
4	r_0707	0 r_0707	0	0
5	r_0708	0 r_0708	0	0
6				
7	r_0711	0.02518 r_0711	0.02518	0
8	r_0712	0 r_0712	0	0
9	r_0713	999.9563 r_0713	999.9563	0
10	r_0714	-999.893 r_0714	-999.893	0
11	r_0715	0 r_0715	0	0
12	r_0716	0 r_0716	0	0
13	r_0717	0 r_0717	0	0
14	r_0718	0 r_0718	0	0
15	r_0719	0 r_0719	0	0
16	r_0721	0 r_0721	0	0
17				
18	r_0722	0.071117 r_0722	0.071117	0
19	r_0723	-0.07112 r_0723	-0.07112	0
20	r_0724	0 r_0724	0	0
21	r_0725	1.179836 r_0725	1.179836	0
22	r_0726	0.001734 r_0726	0.001734	0
23	r_0727	0.006194 r_0727	0.006194	0
24	r_0728	0 r_0728	0	0
25	r_0729	0.004461 r_0729	0.004461	0
26	r_0730	0 r_0730	0	0
27	r_0731	0 r_0731	0	0
28	r_0732	1.179836 r_0732	1.179836	0
29	r_0733	0 r_0733	0	0
30	r_0734	0 r_0734	0	0
31	r_0735	0 r_0735	0	0
32	r_0736	0.003616 r_0736	0.003616	0
33	r_0737	0 r_0737	0	0
34	r_0738	0 r_0738	0	0
35	r_0739	0.003616 r_0739	0.003616	0
36	r_0747	3.79E-05 r_0747	3.79E-05	0
37	r_0748	0 r_0748	0	0
38	r_0749	0 r_0749	0	0
39	r_0750	0 r_0750	0	0
40	r_0751	0 r_0751	0	0
41	r_0752	0 r_0752	0	0
42	r_0753	0 r_0753	0	0
43	r_0754	0 r_0754	0	0
44	r_0755	0 r_0755	0	0
45	r_0756	0 r_0756	0	0
46	r_0757	0.000283 r_0757	0.000283	0
47	r_0758	0.000283 r_0758	0.000283	0
48	r_0759	0.028629 r_0759	0.028629	0
49	r_0760	8.80E-08 r_0760	8.80E-08	0
50	r_0761	0 r_0761	0	0
51				
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1				
2	r_0762	0.015124	r_0762	0.015124
3	r_0763	0	r_0763	0
4	r_0764	0	r_0764	0
5	r_0765	0	r_0765	0
6	r_0766	0	r_0766	0
7	r_0767	0	r_0767	0
8	r_0768	0.015124	r_0768	0.015124
9	r_0769	0	r_0769	0
10	r_0770	3.108438	r_0770	3.108438
11	r_0771	0.015124	r_0771	0.015124
12	r_0772	0	r_0772	0
13	r_0773	0.701722	r_0773	0.701722
14	r_0774	0	r_0774	0
15	r_0775	0	r_0775	0
16	r_0781	0	r_0781	0
17	r_0782	0	r_0782	0
18	r_0783	0	r_0783	0
19	r_0784	0	r_0784	0
20	r_0785	0.015124	r_0785	0.015124
21	r_0786	0.015124	r_0786	0.015124
22	r_0787	0	r_0787	0
23	r_0788	0	r_0788	0
24	r_0789	0	r_0789	0
25	r_0790	0	r_0790	0
26	r_0791	0	r_0791	0
27	r_0792	0.003123	r_0792	0.003123
28	r_0793	0	r_0793	0
29	r_0795	0	r_0795	0
30	r_0796	0	r_0796	0
31	r_0797	0	r_0797	0
32	r_0798	0	r_0798	0
33	r_0799	0	r_0799	0
34	r_0800	0.096525	r_0800	0.096525
35	r_0801	0	r_0801	0
36	r_0802	0	r_0802	0
37	r_0803	0	r_0803	0
38	r_0804	0	r_0804	0
39	r_0805	0	r_0805	0
40	r_0806	0	r_0806	0
41	r_0807	0	r_0807	0
42	r_0810	0	r_0810	0
43	r_0811	0.251817	r_0811	0.251817
44	r_0812	0	r_0812	0
45	r_0813	0.005041	r_0813	0.005041
46	r_0815	0	r_0815	0
47	r_0816	0.014138	r_0816	0.014138
48	r_0817	0	r_0817	0
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1				
2	r_0818	0.028629	r_0818	0.028629
3	r_0819	0.01449	r_0819	0.01449
4	r_0820	-0.00973	r_0820	-0.00973
5	r_0821	0.009731	r_0821	0.009731
6	r_0831	7.04E-07	r_0831	7.04E-07
7	r_0832	7.04E-07	r_0832	7.04E-07
8	r_0841	0	r_0841	0
9	r_0842	0	r_0842	0
10	r_0843	0	r_0843	0
11	r_0844	0	r_0844	0
12	r_0845	0	r_0845	0
13	r_0847	0	r_0847	0
14	r_0848	0	r_0848	0
15	r_0849	0	r_0849	0
16	r_0850	0	r_0850	0
17	r_0851	999.954	r_0851	999.954
18	r_0852	0.011781	r_0852	0.011781
19	r_0853	0	r_0853	0
20	r_0854	0	r_0854	0
21	r_0855	0.023833	r_0855	0.023833
22	r_0882	8.80E-08	r_0882	8.80E-08
23	r_0883	0.005041	r_0883	0.005041
24	r_0884	0	r_0884	0
25	r_0885	0	r_0885	0
26	r_0886	0	r_0886	0
27	r_0887	0.608199	r_0887	0.608199
28	r_0888	0.247356	r_0888	0.247356
29	r_0889	0.029945	r_0889	0.029945
30	r_0890	0	r_0890	0
31	r_0891	0.652945	r_0891	0.652945
32	r_0892	1.193469	r_0892	1.193469
33	r_0893	0.540524	r_0893	0.540524
34	r_0902	-0.07112	r_0902	-0.07112
35	r_0903	0	r_0903	0
36	r_0904	0.003616	r_0904	0.003616
37	r_0905	0	r_0905	0
38	r_0906	0	r_0906	0
39	r_0907	0	r_0907	0
40	r_0908	0.023833	r_0908	0.023833
41	r_0909	0.005833	r_0909	0.005833
42	r_0910	0.005833	r_0910	0.005833
43	r_0911	0.023833	r_0911	0.023833
44	r_0912	0.029666	r_0912	0.029666
45	r_0913	0.017622	r_0913	0.017622
46	r_0914	0.023833	r_0914	0.023833
47	r_0915	0.023833	r_0915	0.023833
48	r_0916	0.072143	r_0916	0.072143
49				
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2	r_0917	0.652945	r_0917	0.652945
3	r_0918	0.652945	r_0918	0.652945
4	r_0919	0	r_0919	0
5	r_0920	0	r_0920	0
6	r_0921	0	r_0921	0
7	r_0922	0	r_0922	0
8	r_0929	0	r_0929	0
9	r_0929	0	r_0929	0
10	r_0935	3.52E-07	r_0935	3.52E-07
11	r_0936	0	r_0936	0
12	r_0937	0	r_0937	0
13	r_0938	0.011781	r_0938	0.011781
14	r_0939	0.008974	r_0939	0.008974
15	r_0940	0	r_0940	0
16	r_0941	0.01449	r_0941	0.01449
17	r_0942	4.40E-08	r_0942	4.40E-08
18	r_0943	0	r_0943	0
19	r_0949	0	r_0949	0
20	r_0950	0	r_0950	0
21	r_0951	0	r_0951	0
22	r_0953	0	r_0953	0
23	r_0954	0	r_0954	0
24	r_0955	0	r_0955	0
25	r_0956	0	r_0956	0
26	r_0957	0.01449	r_0957	0.01449
27	r_0958	0.172741	r_0958	0.172741
28	r_0959	0.016002	r_0959	0.016002
29	r_0960	0	r_0960	0
30	r_0961	0.151741	r_0961	0.151741
31	r_0962	0.463771	r_0962	0.463771
32	r_0963	0	r_0963	0
33	r_0965	0	r_0965	0
34	r_0966	0	r_0966	0
35	r_0967	0.000174	r_0967	0.000174
36	r_0968	8.71E-05	r_0968	8.71E-05
37	r_0969	0	r_0969	0
38	r_0970	0	r_0970	0
39	r_0971	0	r_0971	0
40	r_0972	0	r_0972	0
41	r_0973	3.44E-05	r_0973	3.44E-05
42	r_0974	0.000317	r_0974	0.000317
43	r_0975	0	r_0975	0
44	r_0976	0.000493	r_0976	0.000493
45	r_0977	0	r_0977	0
46	r_0978	0.000211	r_0978	0.000211
47	r_0979	0	r_0979	0
48	r_0982	0.070811	r_0982	0.070811
49	r_0983	0	r_0983	0
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1				
2	r_0984	-0.04104	r_0984	-0.04104
3	r_0985	0	r_0985	0
4	r_0986	1.85E-05	r_0986	1.85E-05
5	r_0987	0	r_0987	0
6	r_0988	0.02518	r_0988	0.02518
7	r_0989	0.02518	r_0989	0.02518
8	r_0990	0.608199	r_0990	0.608199
9	r_0992	0	r_0992	0
10	r_0993	3.79E-05	r_0993	3.79E-05
11	r_0995	0.016312	r_0995	0.016312
12	r_0996	0.038377	r_0996	0.038377
13	r_0997	0.038377	r_0997	0.038377
14	r_0998	0	r_0998	0
15	r_0999	0	r_0999	0
16	r_1000	0	r_1000	0
17	r_1001	0	r_1001	0
18	r_1002	0	r_1002	0
19	r_1003	0	r_1003	0
20	r_1004	0	r_1004	0
21	r_1005	0	r_1005	0
22	r_1006	0	r_1006	0
23	r_1007	0	r_1007	0
24	r_1008	0	r_1008	0
25	r_1009	0	r_1009	0
26	r_1010	0	r_1010	0
27	r_1011	0.000603	r_1011	0.000603
28	r_1012	0.000603	r_1012	0.000603
29	r_1021	0.009731	r_1021	0.009731
30	r_1022	0	r_1022	0
31	r_1023	0	r_1023	0
32	r_1024	0	r_1024	0
33	r_1025	0	r_1025	0
34	r_1026	0.005041	r_1026	0.005041
35	r_1027	0.005041	r_1027	0.005041
36	r_1029	0	r_1029	0
37	r_1030	0	r_1030	0
38	r_1031	0	r_1031	0
39	r_1032	0	r_1032	0
40	r_1033	0	r_1033	0
41	r_1034	0	r_1034	0
42	r_1035	0	r_1035	0
43	r_1036	0	r_1036	0
44	r_1037	0	r_1037	0
45	r_1038	0.006097	r_1038	0.006097
46	r_1039	0	r_1039	0
47	r_1040	0	r_1040	0
48	r_1041	0.033213	r_1041	0.033213
49				
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2	r_1042	0.016839	r_1042	0.016839
3	r_1043	0	r_1043	0
4	r_1045	0.000317	r_1045	0.000317
5	r_1046	0	r_1046	0
6	r_1047	0	r_1047	0
7	r_1048	-0.60953	r_1048	-0.60953
8	r_1049	-0.00133	r_1049	-0.00133
9	r_1050	-0.03971	r_1050	-0.03971
10	r_1051	0.002059	r_1051	0.002059
11	r_1054	0.607356	r_1054	0.607356
12	r_1055	0.017622	r_1055	0.017622
13	r_1056	0	r_1056	0
14	r_1057	0.002499	r_1057	0.002499
15	r_1058	0	r_1058	0
16	r_1063	1000	r_1063	1000
17	r_1065	0	r_1065	0
18	r_1066	0.008974	r_1066	0.008974
19	r_1067	0	r_1067	0
20	r_1068	0	r_1068	0
21	r_1069	8.80E-08	r_1069	8.80E-08
22	r_1070	0	r_1070	0
23	r_1071	-1000	r_1071	-1000
24	r_1072	0.004461	r_1072	0.004461
25	r_1073	0	r_1073	0
26	r_1074	0	r_1074	0
27	r_1075	0	r_1075	0
28	r_1076	0	r_1076	0
29	r_1077	0	r_1077	0
30	r_1078	0	r_1078	0
31	r_1079	0	r_1079	0
32	r_1080	0	r_1080	0
33	r_1081	8.80E-08	r_1081	8.80E-08
34	r_1082	0	r_1082	0
35	r_1083	8.80E-08	r_1083	8.80E-08
36	r_1084	-999.753	r_1084	-999.753
37	r_1087	-1000	r_1087	-1000
38	r_1088	999.9767	r_1088	999.9767
39	r_1089	0.02328	r_1089	0.02328
40	r_1090	0	r_1090	0
41	r_1091	0	r_1091	0
42	r_1092	0	r_1092	0
43	r_1093	0	r_1093	0
44	r_1094	0	r_1094	0
45	r_1095	0	r_1095	0
46	r_1619	0	r_1619	0
47	r_1838	0.02518	r_1838	0.02518
48	r_2029	0	r_2029	0
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58				
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1				
2	r_2112	0	r_2112	0
3	r_2113	0	r_2113	0
4	r_2114	0.015124	r_2114	0.015124
5	r_2115	0	r_2115	0
6	r_2116	0	r_2116	0
7	r_2117	-999.966	r_2117	-999.966
8	r_2118	0	r_2118	0
9	r_2119	-999.991	r_2119	-999.991
10	r_2126	0	r_2126	0
11	r_2131	0.094939	r_2131	0.094939
12	r_2140	0.001863	r_2140	0.001863
13	r_2141	0.000109	r_2141	0.000109
14	r_2142	0	r_2142	0
15	r_2143	0	r_2143	0
16	r_2144	0	r_2144	0
17	r_2145	0	r_2145	0
18	r_2146	0	r_2146	0
19	r_2147	0	r_2147	0
20	r_2148	0	r_2148	0
21	r_2149	0	r_2149	0
22	r_2150	0	r_2150	0
23	r_2151	0	r_2151	0
24	r_2152	0	r_2152	0
25	r_2153	0	r_2153	0
26	r_2154	0	r_2154	0
27	r_2155	0	r_2155	0
28	r_2156	0	r_2156	0
29	r_2157	3.79E-05	r_2157	3.79E-05
30	r_2158	3.79E-05	r_2158	3.79E-05
31	r_2159	3.79E-05	r_2159	3.79E-05
32	r_2160	0	r_2160	0
33	r_2161	0	r_2161	0
34	r_2162	0	r_2162	0
35	r_2163	0	r_2163	0
36	r_2164	3.79E-05	r_2164	3.79E-05
37	r_2165	3.79E-05	r_2165	3.79E-05
38	r_2166	3.79E-05	r_2166	3.79E-05
39	r_2167	0	r_2167	0
40	r_2168	0	r_2168	0
41	r_2169	0	r_2169	0
42	r_2170	0	r_2170	0
43	r_2171	3.79E-05	r_2171	3.79E-05
44	r_2172	3.79E-05	r_2172	3.79E-05
45	r_2173	3.79E-05	r_2173	3.79E-05
46	r_2174	0	r_2174	0
47	r_2175	0	r_2175	0
48	r_2176	0	r_2176	0
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58				
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1				
2	r_2177	0	r_2177	0
3	r_2178	3.79E-05	r_2178	3.79E-05
4	r_2179	3.79E-05	r_2179	3.79E-05
5	r_2180	3.79E-05	r_2180	3.79E-05
6	r_2181	0	r_2181	0
7	r_2182	0.000843	r_2182	0.000843
8	r_2183	7.14E-05	r_2183	7.14E-05
9	r_2184	1000	r_2184	1000
10	r_2194	-1000	r_2194	-1000
11	r_2195	999.9999	r_2195	999.9999
12	r_2196	-1000	r_2196	-1000
13	r_2197	-1000	r_2197	-1000
14	r_2198	-1000	r_2198	-1000
15	r_2199	0.001939	r_2199	0.001939
16	r_2200	-1000	r_2200	-1000
17	r_2201	1000	r_2201	1000
18	r_2202	-1000	r_2202	-1000
19	r_2203	1000	r_2203	1000
20	r_2204	999.9999	r_2204	999.9999
21	r_2205	-0.00194	r_2205	-0.00194
22	r_2206	0	r_2206	0
23	r_2207	0	r_2207	0
24	r_2208	0	r_2208	0
25	r_2209	0	r_2209	0
26	r_2210	0	r_2210	0
27	r_2211	0	r_2211	0
28	r_2212	0	r_2212	0
29	r_2213	0	r_2213	0
30	r_2214	1000	r_2214	1000
31	r_2215	-1000	r_2215	-1000
32	r_2216	0	r_2216	0
33	r_2217	-1000	r_2217	-1000
34	r_2218	1000	r_2218	1000
35	r_2232	0	r_2232	0
36	r_2233	0	r_2233	0
37	r_2234	0	r_2234	0
38	r_2235	0	r_2235	0
39	r_2236	0	r_2236	0
40	r_2237	0	r_2237	0
41	r_2238	0	r_2238	0
42	r_2239	0	r_2239	0
43	r_2240	0	r_2240	0
44	r_2241	0	r_2241	0
45	r_2242	0	r_2242	0
46	r_2243	0	r_2243	0
47	r_2244	0	r_2244	0
48	r_2245	0	r_2245	0
49	r_2246	0	r_2246	0
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57				
58				
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1				
2	r_2247	0 r_2247	0	0
3	r_2248	0 r_2248	0	0
4	r_2249	0 r_2249	0	0
5	r_2250	0 r_2250	0	0
6	r_2251	0 r_2251	0	0
7	r_2252	0 r_2252	0	0
8	r_2253	0 r_2253	0	0
9	r_2254	0 r_2254	0	0
10	r_2255	0 r_2255	0	0
11	r_2256	0 r_2256	0	0
12	r_2257	0 r_2257	0	0
13	r_2258	0 r_2258	0	0
14	r_2259	0 r_2259	0	0
15	r_2260	0 r_2260	0	0
16	r_2261	0 r_2261	0	0
17	r_2262	0 r_2262	0	0
18	r_2263	0 r_2263	0	0
19	r_2264	0 r_2264	0	0
20	r_2265	0 r_2265	0	0
21	r_2266	0 r_2266	0	0
22	r_2267	0 r_2267	0	0
23	r_2268	0 r_2268	0	0
24	r_2269	0 r_2269	0	0
25	r_2270	0 r_2270	0	0
26	r_2271	0 r_2271	0	0
27	r_2272	0 r_2272	0	0
28	r_2273	0 r_2273	0	0
29	r_2274	0 r_2274	0	0
30	r_2275	0 r_2275	0	0
31	r_2276	0 r_2276	0	0
32	r_2277	0 r_2277	0	0
33	r_2278	0 r_2278	0	0
34	r_2279	0 r_2279	0	0
35	r_2280	0 r_2280	0	0
36	r_2281	0 r_2281	0	0
37	r_2282	0 r_2282	0	0
38	r_2283	0 r_2283	0	0
39	r_2284	0 r_2284	0	0
40	r_2285	0 r_2285	0	0
41	r_2286	0 r_2286	0	0
42	r_2287	0 r_2287	0	0
43	r_2288	0 r_2288	0	0
44	r_2289	0 r_2289	0	0
45	r_2290	0 r_2290	0	0
46	r_2291	0 r_2291	0	0
47	r_2292	0 r_2292	0	0
48	r_2293	0 r_2293	0	0
49				
50				

1				
2	r_2294	0 r_2294	0	0
3	r_2295	0 r_2295	0	0
4	r_2296	0 r_2296	0	0
5	r_2297	0 r_2297	0	0
6	r_2298	0 r_2298	0	0
7	r_2299	0 r_2299	0	0
8	r_2299	0 r_2299	0	0
9	r_2300	0 r_2300	0	0
10	r_2301	0 r_2301	0	0
11	r_2302	0 r_2302	0	0
12	r_2302	0 r_2302	0	0
13	r_2303	0 r_2303	0	0
14	r_2304	0 r_2304	0	0
15	r_2305	999.9947 r_2305	999.9947	0
16	r_2308	0.000843 r_2308	0.000843	0
17	r_2309	0 r_2309	0	0
18	r_2310	0 r_2310	0	0
19	r_2310	0 r_2310	0	0
20	r_2311	0 r_2311	0	0
21	r_2312	0 r_2312	0	0
22	r_2313	0 r_2313	0	0
23	r_2314	0 r_2314	0	0
24	r_2314	0 r_2314	0	0
25	r_2315	0 r_2315	0	0
26	r_2316	0 r_2316	0	0
27	r_2317	0 r_2317	0	0
28	r_2318	0 r_2318	0	0
29	r_2318	0 r_2318	0	0
30	r_2319	0 r_2319	0	0
31	r_2320	0 r_2320	0	0
32	r_2321	0 r_2321	0	0
33	r_2322	0 r_2322	0	0
34	r_2323	0 r_2323	0	0
35	r_2324	0 r_2324	0	0
36	r_2324	0 r_2324	0	0
37	r_2325	0 r_2325	0	0
38	r_2326	0 r_2326	0	0
39	r_2327	0 r_2327	0	0
40	r_2328	0 r_2328	0	0
41	r_2328	0 r_2328	0	0
42	r_2329	0 r_2329	0	0
43	r_2330	0 r_2330	0	0
44	r_2331	0 r_2331	0	0
45	r_2332	0.000843 r_2332	0.000843	0
46	r_2333	0 r_2333	0	0
47	r_2334	0 r_2334	0	0
48	r_2334	0 r_2334	0	0
49	r_2335	0 r_2335	0	0
50	r_2336	0 r_2336	0	0
51	r_2337	0 r_2337	0	0
52	r_2338	0 r_2338	0	0
53	r_2338	0 r_2338	0	0
54	r_2339	0 r_2339	0	0
55	r_2340	0 r_2340	0	0
56	r_2341	0 r_2341	0	0
57	r_2342	0 r_2342	0	0
58	r_2342	0 r_2342	0	0
59				
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1				
2	r_2343	0 r_2343	0	0
3	r_2344	0 r_2344	0	0
4	r_2345	0 r_2345	0	0
5	r_2346	0 r_2346	0	0
6	r_2347	0 r_2347	0	0
7	r_2348	0 r_2348	0	0
8	r_2349	0 r_2349	0	0
9	r_2350	0 r_2350	0	0
10	r_2351	0 r_2351	0	0
11	r_2352	0 r_2352	0	0
12	r_2353	0 r_2353	0	0
13	r_2354	0 r_2354	0	0
14	r_2355	0 r_2355	0	0
15	r_2356	0 r_2356	0	0
16	r_2357	0 r_2357	0	0
17	r_2358	0 r_2358	0	0
18	r_2359	0 r_2359	0	0
19	r_2360	3.33E-05 r_2360	3.33E-05	0
20	r_2361	0 r_2361	0	0
21	r_2362	0 r_2362	0	0
22	r_2363	0 r_2363	0	0
23	r_2364	0 r_2364	0	0
24	r_2365	0 r_2365	0	0
25	r_2366	0 r_2366	0	0
26	r_2367	0 r_2367	0	0
27	r_2368	0 r_2368	0	0
28	r_2369	0 r_2369	0	0
29	r_2370	0 r_2370	0	0
30	r_2371	0 r_2371	0	0
31	r_2372	0 r_2372	0	0
32	r_2373	0 r_2373	0	0
33	r_2374	0 r_2374	0	0
34	r_2375	0 r_2375	0	0
35	r_2376	0 r_2376	0	0
36	r_2377	0 r_2377	0	0
37	r_2378	0 r_2378	0	0
38	r_2379	0 r_2379	0	0
39	r_2380	0 r_2380	0	0
40	r_2381	0 r_2381	0	0
41	r_2382	0 r_2382	0	0
42	r_2383	0 r_2383	0	0
43	r_2384	0 r_2384	0	0
44	r_2385	0 r_2385	0	0
45	r_2386	0 r_2386	0	0
46	r_2387	0 r_2387	0	0
47	r_2388	0 r_2388	0	0
48	r_2389	0 r_2389	0	0
49				
50				

1				
2	r_2390	0	r_2390	0
3	r_2391	0	r_2391	0
4	r_2392	0	r_2392	0
5	r_2393	0	r_2393	0
6	r_2394	0	r_2394	0
7	r_2395	0	r_2395	0
8	r_2396	0	r_2396	0
9	r_2397	0	r_2397	0
10	r_2398	0	r_2398	0
11	r_2399	0	r_2399	0
12	r_2400	0.000109	r_2400	0.000109
13	r_2401	0	r_2401	0
14	r_2402	0	r_2402	0
15	r_2403	0	r_2403	0
16	r_2404	0	r_2404	0
17	r_2405	0	r_2405	0
18	r_2406	0	r_2406	0
19	r_2407	0	r_2407	0
20	r_2408	0	r_2408	0
21	r_2409	0	r_2409	0
22	r_2410	0	r_2410	0
23	r_2411	0	r_2411	0
24	r_2412	0	r_2412	0
25	r_2413	0	r_2413	0
26	r_2414	0	r_2414	0
27	r_2415	0	r_2415	0
28	r_2416	0	r_2416	0
29	r_2417	0	r_2417	0
30	r_2418	0	r_2418	0
31	r_2419	0	r_2419	0
32	r_2420	0	r_2420	0
33	r_2421	0	r_2421	0
34	r_2422	0	r_2422	0
35	r_2423	0	r_2423	0
36	r_2424	0	r_2424	0
37	r_2425	0	r_2425	0
38	r_2426	0	r_2426	0
39	r_2427	0	r_2427	0
40	r_2428	0	r_2428	0
41	r_2429	0	r_2429	0
42	r_2430	0	r_2430	0
43	r_2431	0	r_2431	0
44	r_2432	0.00081	r_2432	0.00081
45	r_2433	0	r_2433	0
46	r_2434	0	r_2434	0
47	r_2435	0	r_2435	0
48	r_2436	0	r_2436	0
49				
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51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_2437	0	r_2437	0
3	r_2438	0	r_2438	0
4	r_2439	0	r_2439	0
5	r_2440	0	r_2440	0
6	r_2441	0	r_2441	0
7	r_2442	0	r_2442	0
8	r_2443	0	r_2443	0
9	r_2444	0	r_2444	0
10	r_2444	0	r_2444	0
11	r_2445	0	r_2445	0
12	r_2446	0.000527	r_2446	0.000527
13	r_2447	0	r_2447	0
14	r_2448	0	r_2448	0
15	r_2449	0	r_2449	0
16	r_2450	0	r_2450	0
17	r_2451	0	r_2451	0
18	r_2452	0	r_2452	0
19	r_2453	0	r_2453	0
20	r_2454	0.000283	r_2454	0.000283
21	r_2455	0	r_2455	0
22	r_2456	0	r_2456	0
23	r_2457	0	r_2457	0
24	r_2458	0	r_2458	0
25	r_2459	0	r_2459	0
26	r_2460	0	r_2460	0
27	r_2461	0	r_2461	0
28	r_2462	0	r_2462	0
29	r_2463	0	r_2463	0
30	r_2464	0.000475	r_2464	0.000475
31	r_2465	0	r_2465	0
32	r_2466	0	r_2466	0
33	r_2467	0	r_2467	0
34	r_2468	0	r_2468	0
35	r_2469	0	r_2469	0
36	r_2470	0	r_2470	0
37	r_2471	0	r_2471	0
38	r_2472	0	r_2472	0
39	r_2473	0	r_2473	0
40	r_2474	0	r_2474	0
41	r_2475	0	r_2475	0
42	r_2476	0	r_2476	0
43	r_2477	0	r_2477	0
44	r_2478	0	r_2478	0
45	r_2479	0	r_2479	0
46	r_2480	0	r_2480	0
47	r_2481	0	r_2481	0
48	r_2482	0	r_2482	0
49	r_2483	0	r_2483	0
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51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_2484	0	r_2484	0
3	r_2485	0	r_2485	0
4	r_2486	0	r_2486	0
5	r_2487	0	r_2487	0
6	r_2488	0.00038	r_2488	0.00038
7	r_2489	0	r_2489	0
8	r_2490	0	r_2490	0
9	r_2491	0	r_2491	0
10	r_2492	0	r_2492	0
11	r_2493	0	r_2493	0
12	r_2494	0	r_2494	0
13	r_2495	0	r_2495	0
14	r_2496	0.00038	r_2496	0.00038
15	r_2497	0	r_2497	0
16	r_2498	0	r_2498	0
17	r_2499	0	r_2499	0
18	r_2500	0	r_2500	0
19	r_2501	0	r_2501	0
20	r_2502	0	r_2502	0
21	r_2503	0	r_2503	0
22	r_2504	0.00038	r_2504	0.00038
23	r_2505	0	r_2505	0
24	r_2506	0	r_2506	0
25	r_2507	0	r_2507	0
26	r_2508	0	r_2508	0
27	r_2509	0	r_2509	0
28	r_2510	0	r_2510	0
29	r_2511	0	r_2511	0
30	r_2512	0	r_2512	0
31	r_2513	0	r_2513	0
32	r_2514	0	r_2514	0
33	r_2515	0	r_2515	0
34	r_2516	0	r_2516	0
35	r_2517	0	r_2517	0
36	r_2518	0	r_2518	0
37	r_2519	0	r_2519	0
38	r_2520	0	r_2520	0
39	r_2521	0	r_2521	0
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41	r_2523	0	r_2523	0
42	r_2524	0	r_2524	0
43	r_2525	0	r_2525	0
44	r_2526	0	r_2526	0
45	r_2527	0	r_2527	0
46	r_2528	0	r_2528	0
47	r_2529	0	r_2529	0
48	r_2530	0	r_2530	0
49				
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51				
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53				
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56				
57				
58				
59				
60				

1				
2	r_2531	0 r_2531	0	0
3	r_2532	0 r_2532	0	0
4	r_2533	0 r_2533	0	0
5	r_2534	0 r_2534	0	0
6	r_2535	0 r_2535	0	0
7	r_2536	0 r_2536	0	0
8	r_2537	0 r_2537	0	0
9	r_2538	0 r_2538	0	0
10	r_2539	0 r_2539	0	0
11	r_2540	0 r_2540	0	0
12	r_2541	0 r_2541	0	0
13	r_2542	0 r_2542	0	0
14	r_2543	0 r_2543	0	0
15	r_2544	0 r_2544	0	0
16	r_2545	0 r_2545	0	0
17	r_2546	0 r_2546	0	0
18	r_2547	0 r_2547	0	0
19	r_2548	0 r_2548	0	0
20	r_2549	0 r_2549	0	0
21	r_2550	0 r_2550	0	0
22	r_2551	0 r_2551	0	0
23	r_2552	0 r_2552	0	0
24	r_2553	0 r_2553	0	0
25	r_2554	0 r_2554	0	0
26	r_2555	0 r_2555	0	0
27	r_2556	0 r_2556	0	0
28	r_2557	0 r_2557	0	0
29	r_2558	0 r_2558	0	0
30	r_2559	0 r_2559	0	0
31	r_2560	0 r_2560	0	0
32	r_2561	0 r_2561	0	0
33	r_2562	0 r_2562	0	0
34	r_2563	0 r_2563	0	0
35	r_2564	0 r_2564	0	0
36	r_2565	0 r_2565	0	0
37	r_2566	0 r_2566	0	0
38	r_2567	0 r_2567	0	0
39	r_2568	0 r_2568	0	0
40	r_2569	0 r_2569	0	0
41	r_2570	0 r_2570	0	0
42	r_2571	0 r_2571	0	0
43	r_2572	0 r_2572	0	0
44	r_2573	0 r_2573	0	0
45	r_2574	0 r_2574	0	0
46	r_2575	0 r_2575	0	0
47	r_2576	0 r_2576	0	0
48	r_2577	0 r_2577	0	0
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_2578	0 r_2578	0	0
3	r_2579	0 r_2579	0	0
4	r_2580	0 r_2580	0	0
5	r_2581	0 r_2581	0	0
6	r_2582	0 r_2582	0	0
7	r_2583	0 r_2583	0	0
8	r_2584	0 r_2584	0	0
9	r_2585	0 r_2585	0	0
10	r_2586	0 r_2586	0	0
11	r_2587	0 r_2587	0	0
12	r_2588	0 r_2588	0	0
13	r_2589	0 r_2589	0	0
14	r_2590	0 r_2590	0	0
15	r_2591	0 r_2591	0	0
16	r_2592	0 r_2592	0	0
17	r_2593	0 r_2593	0	0
18	r_2594	0 r_2594	0	0
19	r_2595	0 r_2595	0	0
20	r_2596	0 r_2596	0	0
21	r_2597	0 r_2597	0	0
22	r_2598	0 r_2598	0	0
23	r_2599	0 r_2599	0	0
24	r_2600	0 r_2600	0	0
25	r_2601	0 r_2601	0	0
26	r_2602	0 r_2602	0	0
27	r_2603	0 r_2603	0	0
28	r_2604	0 r_2604	0	0
29	r_2605	0 r_2605	0	0
30	r_2606	0 r_2606	0	0
31	r_2607	0 r_2607	0	0
32	r_2608	0 r_2608	0	0
33	r_2609	0 r_2609	0	0
34	r_2610	0 r_2610	0	0
35	r_2611	0 r_2611	0	0
36	r_2612	0 r_2612	0	0
37	r_2613	0 r_2613	0	0
38	r_2614	0 r_2614	0	0
39	r_2615	0 r_2615	0	0
40	r_2616	0 r_2616	0	0
41	r_2617	0 r_2617	0	0
42	r_2618	0 r_2618	0	0
43	r_2619	0 r_2619	0	0
44	r_2620	-1000 r_2620	-1000	0
45	r_2621	-1000 r_2621	-1000	0
46	r_2622	1000 r_2622	1000	0
47	r_2623	1000 r_2623	1000	0
48	r_2624	-1000 r_2624	-1000	0
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_2625	1000 r_2625	1000	0
3	r_2626	-1000 r_2626	-1000	0
4	r_2627	1000 r_2627	1000	0
5	r_2628	-1000 r_2628	-1000	0
6	r_2629	1000 r_2629	1000	0
7	r_2630	-1000 r_2630	-1000	0
8	r_2631	1000 r_2631	1000	0
9	r_2632	-1000 r_2632	-1000	0
10	r_2633	1000 r_2633	1000	0
11	r_2634	-1000 r_2634	-1000	0
12	r_2635	1000 r_2635	1000	0
13	r_2636	-1000 r_2636	-1000	0
14	r_2637	1000 r_2637	1000	0
15	r_2638	1000 r_2638	1000	0
16	r_2639	-1000 r_2639	-1000	0
17	r_2640	-1000 r_2640	-1000	0
18	r_2641	-1000 r_2641	-1000	0
19	r_2642	1000 r_2642	1000	0
20	r_2643	1000 r_2643	1000	0
21	r_2644	-1000 r_2644	-1000	0
22	r_2645	-1000 r_2645	-1000	0
23	r_2646	1000 r_2646	1000	0
24	r_2647	1000 r_2647	1000	0
25	r_2648	-1000 r_2648	-1000	0
26	r_2649	-1000 r_2649	-1000	0
27	r_2650	1000 r_2650	1000	0
28	r_2651	1000 r_2651	1000	0
29	r_2652	-1000 r_2652	-1000	0
30	r_2653	1000 r_2653	1000	0
31	r_2654	1000 r_2654	1000	0
32	r_2655	-1000 r_2655	-1000	0
33	r_2656	-1000 r_2656	-1000	0
34	r_2657	-1000 r_2657	-1000	0
35	r_2658	1000 r_2658	1000	0
36	r_2659	1000 r_2659	1000	0
37	r_2660	-1000 r_2660	-1000	0
38	r_2661	1000 r_2661	1000	0
39	r_2662	-1000 r_2662	-1000	0
40	r_2663	1000 r_2663	1000	0
41	r_2664	-1000 r_2664	-1000	0
42	r_2665	1000 r_2665	1000	0
43	r_2666	1000 r_2666	1000	0
44	r_2667	-1000 r_2667	-1000	0
45	r_2668	-1000 r_2668	-1000	0
46	r_2669	-1000 r_2669	-1000	0
47	r_2670	1000 r_2670	1000	0
48	r_2671	1000 r_2671	1000	0
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_2672	-1000 r_2672	-1000	0
3	r_2673	-1000 r_2673	-1000	0
4	r_2674	1000 r_2674	1000	0
5	r_2675	1000 r_2675	1000	0
6	r_2676	1000 r_2676	1000	0
7	r_2677	-1000 r_2677	-1000	0
8	r_2678	1000 r_2678	1000	0
9	r_2679	-1000 r_2679	-1000	0
10	r_2680	0 r_2680	0	0
11	r_2681	0 r_2681	0	0
12	r_2682	1000 r_2682	1000	0
13	r_2683	-1000 r_2683	-1000	0
14	r_2684	1000 r_2684	1000	0
15	r_2685	1000 r_2685	1000	0
16	r_2686	-1000 r_2686	-1000	0
17	r_2687	-1000 r_2687	-1000	0
18	r_2688	1000 r_2688	1000	0
19	r_2689	-1000 r_2689	-1000	0
20	r_2690	1000 r_2690	1000	0
21	r_2691	-1000 r_2691	-1000	0
22	r_2692	1000 r_2692	1000	0
23	r_2693	1000 r_2693	1000	0
24	r_2694	-1000 r_2694	-1000	0
25	r_2695	-1000 r_2695	-1000	0
26	r_2696	1000 r_2696	1000	0
27	r_2697	-1000 r_2697	-1000	0
28	r_2698	-1000 r_2698	-1000	0
29	r_2699	1000 r_2699	1000	0
30	r_2700	1000 r_2700	1000	0
31	r_2701	-1000 r_2701	-1000	0
32	r_2702	-1000 r_2702	-1000	0
33	r_2703	1000 r_2703	1000	0
34	r_2704	1000 r_2704	1000	0
35	r_2705	1000 r_2705	1000	0
36	r_2706	-1000 r_2706	-1000	0
37	r_2707	-1000 r_2707	-1000	0
38	r_2708	1000 r_2708	1000	0
39	r_2709	1000 r_2709	1000	0
40	r_2710	-1000 r_2710	-1000	0
41	r_2711	-1000 r_2711	-1000	0
42	r_2712	1000 r_2712	1000	0
43	r_2713	-1000 r_2713	-1000	0
44	r_2714	1000 r_2714	1000	0
45	r_2715	-1000 r_2715	-1000	0
46	r_2716	1000 r_2716	1000	0
47	r_2717	-1000 r_2717	-1000	0
48	r_2718	-1000 r_2718	-1000	0
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_2719	1000 r_2719	1000	0
3	r_2720	1000 r_2720	1000	0
4	r_2721	-1000 r_2721	-1000	0
5	r_2722	-1000 r_2722	-1000	0
6	r_2723	1000 r_2723	1000	0
7	r_2724	1000 r_2724	1000	0
8	r_2725	-1000 r_2725	-1000	0
9	r_2726	0 r_2726	0	0
10	r_2727	0 r_2727	0	0
11	r_2728	1000 r_2728	1000	0
12	r_2729	-1000 r_2729	-1000	0
13	r_2730	1000 r_2730	1000	0
14	r_2731	-1000 r_2731	-1000	0
15	r_2732	-1000 r_2732	-1000	0
16	r_2733	1000 r_2733	1000	0
17	r_2734	1000 r_2734	1000	0
18	r_2735	-1000 r_2735	-1000	0
19	r_2736	1000 r_2736	1000	0
20	r_2737	1000 r_2737	1000	0
21	r_2738	-1000 r_2738	-1000	0
22	r_2739	-1000 r_2739	-1000	0
23	r_2740	-1000 r_2740	-1000	0
24	r_2741	0 r_2741	0	0
25	r_2742	0 r_2742	0	0
26	r_2743	1000 r_2743	1000	0
27	r_2744	1000 r_2744	1000	0
28	r_2745	-1000 r_2745	-1000	0
29	r_2746	1000 r_2746	1000	0
30	r_2747	-1000 r_2747	-1000	0
31	r_2748	1000 r_2748	1000	0
32	r_2749	-1000 r_2749	-1000	0
33	r_2750	-1000 r_2750	-1000	0
34	r_2751	1000 r_2751	1000	0
35	r_2752	-1000 r_2752	-1000	0
36	r_2753	1000 r_2753	1000	0
37	r_2754	-1000 r_2754	-1000	0
38	r_2755	1000 r_2755	1000	0
39	r_2756	-1000 r_2756	-1000	0
40	r_2757	1000 r_2757	1000	0
41	r_2758	-1000 r_2758	-1000	0
42	r_2759	1000 r_2759	1000	0
43	r_2760	1000 r_2760	1000	0
44	r_2761	-1000 r_2761	-1000	0
45	r_2762	0 r_2762	0	0
46	r_2763	0 r_2763	0	0
47	r_2764	1000 r_2764	1000	0
48	r_2765	-1000 r_2765	-1000	0
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_2766	1000 r_2766	1000	0
3	r_2767	-1000 r_2767	-1000	0
4	r_2768	-1000 r_2768	-1000	0
5	r_2769	1000 r_2769	1000	0
6	r_2770	-1000 r_2770	-1000	0
7	r_2771	1000 r_2771	1000	0
8	r_2772	-1000 r_2772	-1000	0
9	r_2773	1000 r_2773	1000	0
10	r_2774	1000 r_2774	1000	0
11	r_2775	-1000 r_2775	-1000	0
12	r_2776	0 r_2776	0	0
13	r_2777	1000 r_2777	1000	0
14	r_2778	0 r_2778	0	0
15	r_2779	-1000 r_2779	-1000	0
16	r_2780	1000 r_2780	1000	0
17	r_2781	1000 r_2781	1000	0
18	r_2782	-1000 r_2782	-1000	0
19	r_2783	-1000 r_2783	-1000	0
20	r_2784	-1000 r_2784	-1000	0
21	r_2785	1000 r_2785	1000	0
22	r_2786	-1000 r_2786	-1000	0
23	r_2787	1000 r_2787	1000	0
24	r_2788	1000 r_2788	1000	0
25	r_2789	-1000 r_2789	-1000	0
26	r_2790	1000 r_2790	1000	0
27	r_2791	-1000 r_2791	-1000	0
28	r_2792	1000 r_2792	1000	0
29	r_2793	1000 r_2793	1000	0
30	r_2794	-1000 r_2794	-1000	0
31	r_2795	-1000 r_2795	-1000	0
32	r_2796	1000 r_2796	1000	0
33	r_2797	-1000 r_2797	-1000	0
34	r_2798	1000 r_2798	1000	0
35	r_2799	-1000 r_2799	-1000	0
36	r_2800	1000 r_2800	1000	0
37	r_2801	-1000 r_2801	-1000	0
38	r_2802	1000 r_2802	1000	0
39	r_2803	-1000 r_2803	-1000	0
40	r_2804	-1000 r_2804	-1000	0
41	r_2805	1000 r_2805	1000	0
42	r_2806	-1000 r_2806	-1000	0
43	r_2807	1000 r_2807	1000	0
44	r_2808	-1000 r_2808	-1000	0
45	r_2809	1000 r_2809	1000	0
46	r_2810	-1000 r_2810	-1000	0
47	r_2811	1000 r_2811	1000	0
48	r_2820	0 r_2820	0	0
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_2821	0 r_2821	0	0
3	r_2822	0 r_2822	0	0
4	r_2823	0 r_2823	0	0
5	r_2824	0 r_2824	0	0
6	r_2825	0 r_2825	0	0
7	r_2826	0 r_2826	0	0
8	r_2827	0 r_2827	0	0
9	r_2828	0 r_2828	0	0
10	r_2829	0 r_2829	0	0
11	r_2830	0 r_2830	0	0
12	r_2831	0 r_2831	0	0
13	r_2832	0 r_2832	0	0
14	r_2833	0 r_2833	0	0
15	r_2834	0 r_2834	0	0
16	r_2835	0 r_2835	0	0
17	r_2836	0 r_2836	0	0
18	r_2837	0 r_2837	0	0
19	r_2838	0 r_2838	0	0
20	r_2839	0 r_2839	0	0
21	r_2840	0 r_2840	0	0
22	r_2841	0 r_2841	0	0
23	r_2842	0 r_2842	0	0
24	r_2843	0 r_2843	0	0
25	r_2844	0 r_2844	0	0
26	r_2845	0 r_2845	0	0
27	r_2846	0 r_2846	0	0
28	r_2847	0 r_2847	0	0
29	r_2848	0 r_2848	0	0
30	r_2849	0 r_2849	0	0
31	r_2850	0 r_2850	0	0
32	r_2851	0 r_2851	0	0
33	r_2852	0 r_2852	0	0
34	r_2853	0 r_2853	0	0
35	r_2854	0 r_2854	0	0
36	r_2855	0 r_2855	0	0
37	r_2856	0 r_2856	0	0
38	r_2857	0 r_2857	0	0
39	r_2858	0 r_2858	0	0
40	r_2859	0 r_2859	0	0
41	r_2860	0 r_2860	0	0
42	r_2861	0 r_2861	0	0
43	r_2862	0 r_2862	0	0
44	r_2863	0 r_2863	0	0
45	r_2864	0 r_2864	0	0
46	r_2865	0 r_2865	0	0
47	r_2866	0 r_2866	0	0
48	r_2867	0 r_2867	0	0
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_2868	0 r_2868	0	0
3	r_2869	0 r_2869	0	0
4	r_2870	0 r_2870	0	0
5	r_2871	0 r_2871	0	0
6	r_2872	0 r_2872	0	0
7	r_2873	0 r_2873	0	0
8	r_2874	0 r_2874	0	0
9	r_2875	0 r_2875	0	0
10	r_2876	0 r_2876	0	0
11	r_2877	0 r_2877	0	0
12	r_2878	0 r_2878	0	0
13	r_2879	0 r_2879	0	0
14	r_2880	0 r_2880	0	0
15	r_2881	0 r_2881	0	0
16	r_2882	0 r_2882	0	0
17	r_2883	0 r_2883	0	0
18	r_2884	1000 r_2884	1000	0
19	r_2885	0 r_2885	0	0
20	r_2886	-1000 r_2886	-1000	0
21	r_2887	-1000 r_2887	-1000	0
22	r_2888	1000 r_2888	1000	0
23	r_2889	-1000 r_2889	-1000	0
24	r_2890	1000 r_2890	1000	0
25	r_2891	1000 r_2891	1000	0
26	r_2892	-1000 r_2892	-1000	0
27	r_2893	1000 r_2893	1000	0
28	r_2894	1000 r_2894	1000	0
29	r_2895	1000 r_2895	1000	0
30	r_2896	-1000 r_2896	-1000	0
31	r_2897	-1000 r_2897	-1000	0
32	r_2898	-1000 r_2898	-1000	0
33	r_2899	1000 r_2899	1000	0
34	r_2900	-1000 r_2900	-1000	0
35	r_2901	-1000 r_2901	-1000	0
36	r_2902	-1000 r_2902	-1000	0
37	r_2903	-1000 r_2903	-1000	0
38	r_2904	-1000 r_2904	-1000	0
39	r_2905	-1000 r_2905	-1000	0
40	r_2906	-1000 r_2906	-1000	0
41	r_2907	-1000 r_2907	-1000	0
42	r_2908	-1000 r_2908	-1000	0
43	r_2909	-1000 r_2909	-1000	0
44	r_2910	1000 r_2910	1000	0
45	r_2911	-1000 r_2911	-1000	0
46	r_2912	-1000 r_2912	-1000	0
47	r_2913	1000 r_2913	1000	0
48	r_2914	-1000 r_2914	-1000	0
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_2915	-1000 r_2915	-1000	0
3	r_2916	-1000 r_2916	-1000	0
4	r_2917	1000 r_2917	1000	0
5	r_2918	-1000 r_2918	-1000	0
6	r_2919	1000 r_2919	1000	0
7	r_2920	1000 r_2920	1000	0
8	r_2921	1000 r_2921	1000	0
9	r_2922	0 r_2922	0	0
10	r_2922	0 r_2922	0	0
11	r_2923	-1000 r_2923	-1000	0
12	r_2924	1000 r_2924	1000	0
13	r_2924	1000 r_2924	1000	0
14	r_2925	0 r_2925	0	0
15	r_2926	1000 r_2926	1000	0
16	r_2927	-1000 r_2927	-1000	0
17	r_2928	1000 r_2928	1000	0
18	r_2928	1000 r_2928	1000	0
19	r_2929	1000 r_2929	1000	0
20	r_2930	1000 r_2930	1000	0
21	r_2931	-1000 r_2931	-1000	0
22	r_2932	1000 r_2932	1000	0
23	r_2933	-1000 r_2933	-1000	0
24	r_2933	-1000 r_2933	-1000	0
25	r_2934	-1000 r_2934	-1000	0
26	r_2935	1000 r_2935	1000	0
27	r_2936	-1000 r_2936	-1000	0
28	r_2937	-1000 r_2937	-1000	0
29	r_2938	0 r_2938	0	0
30	r_2938	0 r_2938	0	0
31	r_2939	1000 r_2939	1000	0
32	r_2940	1000 r_2940	1000	0
33	r_2941	1000 r_2941	1000	0
34	r_2942	1000 r_2942	1000	0
35	r_2943	1000 r_2943	1000	0
36	r_2943	1000 r_2943	1000	0
37	r_2944	1000 r_2944	1000	0
38	r_2945	1000 r_2945	1000	0
39	r_2946	1000 r_2946	1000	0
40	r_2947	1000 r_2947	1000	0
41	r_2948	1000 r_2948	1000	0
42	r_2948	1000 r_2948	1000	0
43	r_2949	-1000 r_2949	-1000	0
44	r_2950	1000 r_2950	1000	0
45	r_2951	0 r_2951	0	0
46	r_2952	-1000 r_2952	-1000	0
47	r_2953	-1000 r_2953	-1000	0
48	r_2953	-1000 r_2953	-1000	0
49	r_2954	1000 r_2954	1000	0
50	r_2955	-1000 r_2955	-1000	0
51	r_2956	-1000 r_2956	-1000	0
52	r_2957	1000 r_2957	1000	0
53	r_2958	-1000 r_2958	-1000	0
54	r_2959	-1000 r_2959	-1000	0
55	r_2960	1000 r_2960	1000	0
56	r_2961	1000 r_2961	1000	0
57	r_2961	1000 r_2961	1000	0
58				
59				
60				

1				
2	r_2962	-1000 r_2962	-1000	0
3	r_2963	1000 r_2963	1000	0
4	r_2964	1000 r_2964	1000	0
5	r_2965	1000 r_2965	1000	0
6	r_2966	1000 r_2966	1000	0
7	r_2967	1000 r_2967	1000	0
8	r_2968	1000 r_2968	1000	0
9	r_2969	1000 r_2969	1000	0
10	r_2970	1000 r_2970	1000	0
11	r_2971	1000 r_2971	1000	0
12	r_2972	-1000 r_2972	-1000	0
13	r_2973	1000 r_2973	1000	0
14	r_2974	1000 r_2974	1000	0
15	r_2975	1000 r_2975	1000	0
16	r_2976	1000 r_2976	1000	0
17	r_2977	-1000 r_2977	-1000	0
18	r_2978	1000 r_2978	1000	0
19	r_2979	1000 r_2979	1000	0
20	r_2980	-1000 r_2980	-1000	0
21	r_2981	-1000 r_2981	-1000	0
22	r_2982	1000 r_2982	1000	0
23	r_2983	1000 r_2983	1000	0
24	r_2984	-1000 r_2984	-1000	0
25	r_2985	0 r_2985	0	0
26	r_2986	1000 r_2986	1000	0
27	r_2987	-1000 r_2987	-1000	0
28	r_2988	1000 r_2988	1000	0
29	r_2989	0 r_2989	0	0
30	r_2990	-1000 r_2990	-1000	0
31	r_2991	-1000 r_2991	-1000	0
32	r_2992	-1000 r_2992	-1000	0
33	r_2993	1000 r_2993	1000	0
34	r_2994	-1000 r_2994	-1000	0
35	r_2995	-1000 r_2995	-1000	0
36	r_2996	1000 r_2996	1000	0
37	r_2997	-1000 r_2997	-1000	0
38	r_2998	-1000 r_2998	-1000	0
39	r_2999	1000 r_2999	1000	0
40	r_3000	1000 r_3000	1000	0
41	r_3001	1000 r_3001	1000	0
42	r_3002	-1000 r_3002	-1000	0
43	r_3003	0 r_3003	0	0
44	r_3004	-1000 r_3004	-1000	0
45	r_3005	-1000 r_3005	-1000	0
46	r_3006	-1000 r_3006	-1000	0
47	r_3007	-1000 r_3007	-1000	0
48	r_3008	-1000 r_3008	-1000	0
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_3009	-1000 r_3009	-1000	0
3	r_3010	-1000 r_3010	-1000	0
4	r_3011	-1000 r_3011	-1000	0
5	r_3022	0 r_3022	0	0
6	r_3023	0 r_3023	0	0
7	r_3024	0 r_3024	0	0
8	r_3025	0 r_3025	0	0
9	r_3026	0 r_3026	0	0
10	r_3027	0 r_3027	0	0
11	r_3028	0 r_3028	0	0
12	r_3029	0 r_3029	0	0
13	r_3030	0 r_3030	0	0
14	r_3031	0 r_3031	0	0
15	r_3032	0 r_3032	0	0
16	r_3033	0 r_3033	0	0
17	r_3034	0 r_3034	0	0
18	r_3035	0 r_3035	0	0
19	r_3036	0 r_3036	0	0
20	r_3037	0 r_3037	0	0
21	r_3038	0 r_3038	0	0
22	r_3039	0 r_3039	0	0
23	r_3040	0 r_3040	0	0
24	r_3041	0 r_3041	0	0
25	r_3042	0 r_3042	0	0
26	r_3043	0 r_3043	0	0
27	r_3044	0 r_3044	0	0
28	r_3045	0 r_3045	0	0
29	r_3046	0 r_3046	0	0
30	r_3047	0 r_3047	0	0
31	r_3048	0 r_3048	0	0
32	r_3049	0 r_3049	0	0
33	r_3050	0 r_3050	0	0
34	r_3051	0 r_3051	0	0
35	r_3052	0 r_3052	0	0
36	r_3053	0 r_3053	0	0
37	r_3054	0 r_3054	0	0
38	r_3055	0 r_3055	0	0
39	r_3056	0 r_3056	0	0
40	r_3057	0 r_3057	0	0
41	r_3058	0 r_3058	0	0
42	r_3059	0 r_3059	0	0
43	r_3060	0 r_3060	0	0
44	r_3061	0 r_3061	0	0
45	r_3062	0 r_3062	0	0
46	r_3063	0 r_3063	0	0
47	r_3064	0 r_3064	0	0
48	r_3065	0 r_3065	0	0
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_3066	0 r_3066	0	0
3	r_3067	0 r_3067	0	0
4	r_3068	0 r_3068	0	0
5	r_3069	0 r_3069	0	0
6	r_3070	0 r_3070	0	0
7	r_3071	0 r_3071	0	0
8	r_3072	0 r_3072	0	0
9	r_3073	0 r_3073	0	0
10	r_3074	0 r_3074	0	0
11	r_3075	0 r_3075	0	0
12	r_3076	0 r_3076	0	0
13	r_3077	0 r_3077	0	0
14	r_3078	0 r_3078	0	0
15	r_3079	0 r_3079	0	0
16	r_3080	0 r_3080	0	0
17	r_3081	0 r_3081	0	0
18	r_3082	0 r_3082	0	0
19	r_3083	0 r_3083	0	0
20	r_3084	0 r_3084	0	0
21	r_3085	0 r_3085	0	0
22	r_3086	0 r_3086	0	0
23	r_3087	0 r_3087	0	0
24	r_3088	0 r_3088	0	0
25	r_3089	0 r_3089	0	0
26	r_3090	0 r_3090	0	0
27	r_3091	0 r_3091	0	0
28	r_3092	0 r_3092	0	0
29	r_3093	0 r_3093	0	0
30	r_3094	0 r_3094	0	0
31	r_3095	0 r_3095	0	0
32	r_3096	0 r_3096	0	0
33	r_3097	0 r_3097	0	0
34	r_3098	0 r_3098	0	0
35	r_3099	0 r_3099	0	0
36	r_3100	0 r_3100	0	0
37	r_3101	0 r_3101	0	0
38	r_3102	0 r_3102	0	0
39	r_3103	0 r_3103	0	0
40	r_3104	0 r_3104	0	0
41	r_3105	0 r_3105	0	0
42	r_3106	0 r_3106	0	0
43	r_3107	0 r_3107	0	0
44	r_3108	0 r_3108	0	0
45	r_3109	0 r_3109	0	0
46	r_3110	0 r_3110	0	0
47	r_3111	0 r_3111	0	0
48	r_3112	0 r_3112	0	0
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_3113	0 r_3113	0	0
3	r_3114	0 r_3114	0	0
4	r_3115	0 r_3115	0	0
5	r_3116	0 r_3116	0	0
6	r_3117	0 r_3117	0	0
7	r_3118	0 r_3118	0	0
8	r_3119	0 r_3119	0	0
9	r_3120	0 r_3120	0	0
10	r_3121	0 r_3121	0	0
11	r_3122	0 r_3122	0	0
12	r_3123	0 r_3123	0	0
13	r_3124	0 r_3124	0	0
14	r_3125	0 r_3125	0	0
15	r_3126	0 r_3126	0	0
16	r_3127	0 r_3127	0	0
17	r_3128	0 r_3128	0	0
18	r_3129	0 r_3129	0	0
19	r_3130	0 r_3130	0	0
20	r_3131	0 r_3131	0	0
21	r_3132	0 r_3132	0	0
22	r_3133	0 r_3133	0	0
23	r_3134	0 r_3134	0	0
24	r_3135	0 r_3135	0	0
25	r_3136	0 r_3136	0	0
26	r_3137	0 r_3137	0	0
27	r_3138	0 r_3138	0	0
28	r_3139	0 r_3139	0	0
29	r_3140	0 r_3140	0	0
30	r_3141	0 r_3141	0	0
31	r_3142	0 r_3142	0	0
32	r_3143	0 r_3143	0	0
33	r_3144	0 r_3144	0	0
34	r_3145	0 r_3145	0	0
35	r_3146	0 r_3146	0	0
36	r_3147	0 r_3147	0	0
37	r_3148	0 r_3148	0	0
38	r_3149	0 r_3149	0	0
39	r_3150	0 r_3150	0	0
40	r_3151	0 r_3151	0	0
41	r_3152	0 r_3152	0	0
42	r_3153	0 r_3153	0	0
43	r_3154	0 r_3154	0	0
44	r_3155	0 r_3155	0	0
45	r_3156	0 r_3156	0	0
46	r_3157	0 r_3157	0	0
47	r_3158	0 r_3158	0	0
48	r_3159	0 r_3159	0	0
49				
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1				
2	r_3160	0 r_3160	0	0
3	r_3161	0 r_3161	0	0
4	r_3162	0 r_3162	0	0
5	r_3163	0 r_3163	0	0
6	r_3164	0 r_3164	0	0
7	r_3165	0 r_3165	0	0
8	r_3166	0 r_3166	0	0
9	r_3167	0 r_3167	0	0
10	r_3168	0 r_3168	0	0
11	r_3169	0 r_3169	0	0
12	r_3170	0 r_3170	0	0
13	r_3171	0 r_3171	0	0
14	r_3172	0 r_3172	0	0
15	r_3173	0 r_3173	0	0
16	r_3174	0 r_3174	0	0
17	r_3175	0 r_3175	0	0
18	r_3176	0 r_3176	0	0
19	r_3177	0 r_3177	0	0
20	r_3178	0 r_3178	0	0
21	r_3179	0 r_3179	0	0
22	r_3180	0 r_3180	0	0
23	r_3181	0 r_3181	0	0
24	r_3182	0 r_3182	0	0
25	r_3183	0 r_3183	0	0
26	r_3184	0 r_3184	0	0
27	r_3185	0 r_3185	0	0
28	r_3186	0 r_3186	0	0
29	r_3187	0 r_3187	0	0
30	r_3188	0 r_3188	0	0
31	r_3189	0 r_3189	0	0
32	r_3190	0 r_3190	0	0
33	r_3191	0 r_3191	0	0
34	r_3192	0 r_3192	0	0
35	r_3193	0 r_3193	0	0
36	r_3194	0 r_3194	0	0
37	r_3195	0 r_3195	0	0
38	r_3196	0 r_3196	0	0
39	r_3197	0 r_3197	0	0
40	r_3198	0 r_3198	0	0
41	r_3199	0 r_3199	0	0
42	r_3200	0 r_3200	0	0
43	r_3201	0 r_3201	0	0
44	r_3202	0 r_3202	0	0
45	r_3203	0 r_3203	0	0
46	r_3204	0 r_3204	0	0
47	r_3205	0 r_3205	0	0
48	r_3206	0 r_3206	0	0
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_3207	0 r_3207	0	0
3	r_3208	0 r_3208	0	0
4	r_3209	0 r_3209	0	0
5	r_3210	0 r_3210	0	0
6	r_3211	0 r_3211	0	0
7	r_3212	0 r_3212	0	0
8	r_3213	0 r_3213	0	0
9	r_3214	0 r_3214	0	0
10	r_3215	0 r_3215	0	0
11	r_3216	0 r_3216	0	0
12	r_3217	0 r_3217	0	0
13	r_3218	0 r_3218	0	0
14	r_3219	0 r_3219	0	0
15	r_3220	0 r_3220	0	0
16	r_3221	0 r_3221	0	0
17	r_3222	0 r_3222	0	0
18	r_3223	0 r_3223	0	0
19	r_3224	0 r_3224	0	0
20	r_3225	0 r_3225	0	0
21	r_3226	0 r_3226	0	0
22	r_3227	0 r_3227	0	0
23	r_3228	0 r_3228	0	0
24	r_3229	0 r_3229	0	0
25	r_3230	0 r_3230	0	0
26	r_3231	0 r_3231	0	0
27	r_3232	0 r_3232	0	0
28	r_3233	0 r_3233	0	0
29	r_3234	0 r_3234	0	0
30	r_3235	0 r_3235	0	0
31	r_3236	0 r_3236	0	0
32	r_3237	0 r_3237	0	0
33	r_3238	0 r_3238	0	0
34	r_3239	0 r_3239	0	0
35	r_3240	0 r_3240	0	0
36	r_3241	0 r_3241	0	0
37	r_3242	0 r_3242	0	0
38	r_3243	0 r_3243	0	0
39	r_3244	0 r_3244	0	0
40	r_3245	0 r_3245	0	0
41	r_3246	0 r_3246	0	0
42	r_3247	0 r_3247	0	0
43	r_3248	0 r_3248	0	0
44	r_3249	0 r_3249	0	0
45	r_3250	0 r_3250	0	0
46	r_3251	0 r_3251	0	0
47	r_3252	0 r_3252	0	0
48	r_3253	0 r_3253	0	0
49				
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1				
2	r_3254	0 r_3254	0	0
3	r_3255	0 r_3255	0	0
4	r_3256	0 r_3256	0	0
5	r_3257	0 r_3257	0	0
6	r_3258	0 r_3258	0	0
7	r_3259	0 r_3259	0	0
8	r_3260	0 r_3260	0	0
9	r_3261	0 r_3261	0	0
10	r_3262	0 r_3262	0	0
11	r_3263	0 r_3263	0	0
12	r_3264	0 r_3264	0	0
13	r_3265	0 r_3265	0	0
14	r_3266	0 r_3266	0	0
15	r_3267	0 r_3267	0	0
16	r_3268	0 r_3268	0	0
17	r_3269	0 r_3269	0	0
18	r_3270	0 r_3270	0	0
19	r_3271	0 r_3271	0	0
20	r_3272	0 r_3272	0	0
21	r_3273	0 r_3273	0	0
22	r_3274	0 r_3274	0	0
23	r_3275	0 r_3275	0	0
24	r_3276	0 r_3276	0	0
25	r_3277	0 r_3277	0	0
26	r_3278	0 r_3278	0	0
27	r_3279	0 r_3279	0	0
28	r_3280	0 r_3280	0	0
29	r_3281	0 r_3281	0	0
30	r_3282	0 r_3282	0	0
31	r_3283	0 r_3283	0	0
32	r_3284	0 r_3284	0	0
33	r_3285	0 r_3285	0	0
34	r_3286	0 r_3286	0	0
35	r_3287	0 r_3287	0	0
36	r_3288	0 r_3288	0	0
37	r_3289	0 r_3289	0	0
38	r_3290	0 r_3290	0	0
39	r_3291	0 r_3291	0	0
40	r_3292	0 r_3292	0	0
41	r_3293	0 r_3293	0	0
42	r_3294	0 r_3294	0	0
43	r_3295	0 r_3295	0	0
44	r_3296	0 r_3296	0	0
45	r_3297	0 r_3297	0	0
46	r_3298	0 r_3298	0	0
47	r_3299	0 r_3299	0	0
48	r_3300	0 r_3300	0	0
49				
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51				
52				
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57				
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1				
2	r_3301	0 r_3301	0	0
3	r_3302	0 r_3302	0	0
4	r_3303	0 r_3303	0	0
5	r_3304	0 r_3304	0	0
6	r_3305	0 r_3305	0	0
7	r_3306	0 r_3306	0	0
8	r_3307	0 r_3307	0	0
9	r_3308	0 r_3308	0	0
10	r_3309	0 r_3309	0	0
11	r_3310	0 r_3310	0	0
12	r_3311	0 r_3311	0	0
13	r_3312	0 r_3312	0	0
14	r_3313	0 r_3313	0	0
15	r_3314	0 r_3314	0	0
16	r_3315	0 r_3315	0	0
17	r_3316	0 r_3316	0	0
18	r_3317	0 r_3317	0	0
19	r_3318	0 r_3318	0	0
20	r_3319	0 r_3319	0	0
21	r_3320	0 r_3320	0	0
22	r_3321	0 r_3321	0	0
23	r_3322	0 r_3322	0	0
24	r_3323	0 r_3323	0	0
25	r_3324	0 r_3324	0	0
26	r_3325	0 r_3325	0	0
27	r_3326	0 r_3326	0	0
28	r_3327	0 r_3327	0	0
29	r_3328	0 r_3328	0	0
30	r_3329	0 r_3329	0	0
31	r_3330	0 r_3330	0	0
32	r_3331	0 r_3331	0	0
33	r_4039	0 r_4039	0	0
34	r_4042	0 r_4042	0	0
35	r_4045	0 r_4045	0	0
36	r_0964	0 r_0964	0	0
37	r_1028	0 r_1028	0	0
38	r_1085	0 r_1085	0	0
39	r_1086	0 r_1086	0	0
40	r_1096	0 r_1096	0	0
41	r_1097	0 r_1097	0	0
42	r_1098	0 r_1098	0	0
43	r_1099	0.02518 r_1099	0.02518	0
44	r_1100	0 r_1100	0	0
45	r_1101	0 r_1101	0	0
46	r_1103	0 deleted	0	0
47	r_1104	0 r_1103	0	0
48	r_1106	0 r_1104	0	0
49				
50				

1				
2	r_1107	0 r_1106	0	0
3	r_1108	0 r_1107	0	0
4	r_1109	0 r_1108	0	0
5	r_1110	6.042536 r_1113	0	1
6	r_1111	0 r_1119	0	0
7	r_1112	-1000 r_1120	0	1
8	r_1113	0 r_1121	0	0
9	r_1114	0 r_1122	0	0
10	r_1115	0.597736 r_1123	0	1
11	r_1116	0 r_1124	0	0
12	r_1118	999.8667 r_1130	0	1
13	r_1119	0 r_1131	0	0
14	r_1120	0 r_1132	0	0
15	r_1121	0 r_1133	0	0
16	r_1122	0 r_1134	0	0
17	r_1123	0 r_1135	0	0
18	r_1124	0 r_1136	0	0
19	r_1125	0 r_1137	0	0
20	r_1126	-999.956 r_1138	0	1
21	r_1127	-0.03838 r_1139	0	1
22	r_1128	-1000 r_1146	0	1
23	r_1129	0.003616 r_1149	0	1
24	r_1130	0 r_1151	0	0
25	r_1131	0 r_1161	0	0
26	r_1132	0 r_1162	0	0
27	r_1133	0 r_1164	0	0
28	r_1134	0 r_1167	0	0
29	r_1135	0 r_1168	0	0
30	r_1136	0 r_1169	0	0
31	r_1137	0 r_1170	0	0
32	r_1138	0 r_1171	0	0
33	r_1139	0 r_1172	0	0
34	r_1146	0 r_1173	0	0
35	r_1147	0 r_1174	0	0
36	r_1148	-1000 r_1175	0	1
37	r_1149	0 r_1176	0	0
38	r_1151	0 r_1177	0	0
39	r_1161	0 deleted		0
40	r_1162	0 r_1179	0	0
41	r_1164	0 r_1180	0	0
42	r_1165	0 r_1181	0	0
43	r_1166	1 r_1182	0	1
44	r_1167	0 r_1183	0	0
45	r_1168	0 r_1184	0	0
46	r_1169	0 r_1185	0	0
47	r_1170	0 r_1186	0	0
48	r_1171	0 r_1187	0	0
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

1				
2	r_1172	0 r_1188	0	0
3	r_1173	0 r_1189	0	0
4	r_1174	0 r_1190	0	0
5	r_1175	0 r_1191	0	0
6	r_1176	0 r_1193	0	0
7	r_1177	0 r_1195	0	0
8	r_1179	0 r_1196	0	0
9	r_1180	0 r_1197	0	0
10	r_1181	0 r_1198	0	0
11	r_1182	0 r_1199	0	0
12	r_1183	0 r_1200	0	0
13	r_1184	0 r_1201	0	0
14	r_1185	0 r_1202	0	0
15	r_1186	0 r_1203	0	0
16	r_1187	0 r_1204	0	0
17	r_1188	0 r_1205	0	0
18	r_1189	0 r_1206	0	0
19	r_1190	0 r_1207	0	0
20	r_1191	0 r_1208	0	0
21	r_1192	0 r_1209	0	0
22	r_1193	0 r_1210	0	0
23	r_1194	0.067006 r_1211	0	1
24	r_1195	0 r_1212	0	0
25	r_1196	0 r_1213	0	0
26	r_1197	0 r_1214	0	0
27	r_1198	0 r_1215	0	0
28	r_1199	0 r_1216	0	0
29	r_1200	0 r_1217	0	0
30	r_1201	0 r_1219	0	0
31	r_1202	0 r_1221	0	0
32	r_1203	0 r_1223	0	0
33	r_1204	0 r_1224	0	0
34	r_1205	0 r_1225	0	0
35	r_1206	0 r_1226	0	0
36	r_1207	0 r_1227	0	0
37	r_1208	0 r_1228	0	0
38	r_1209	0 r_1229	0	0
39	r_1210	0 r_1230	0	0
40	r_1211	0 r_1231	0	0
41	r_1212	0 r_1232	0	0
42	r_1213	0 r_1236	0	0
43	r_1214	0 r_1238	0	0
44	r_1215	0 r_1239	0	0
45	r_1216	0 r_1241	0	0
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48	r_1219	0 r_1251	0	0
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2	r_1220	-1000	r_1252	0
3	r_1221	0	r_1253	0
4	r_1222	1000	r_1254	0
5	r_1223	0	r_1255	0
6	r_1224	0	r_1256	0
7	r_1225	0	r_1257	0
8	r_1226	0	r_1258	0
9	r_1227	0	r_1259	0
10	r_1228	0	r_1260	0
11	r_1229	0	r_1261	0
12	r_1230	0	r_1262	0
13	r_1231	0	r_1267	0
14	r_1232	0	r_1268	0
15	r_1235	0	r_1269	0
16	r_1236	0	r_1270	0
17	r_1237	0.028629	r_1271	0
18	r_1238	0	r_1272	0
19	r_1239	0	r_1273	0
20	r_1241	0	r_1274	0
21	r_1242	0	r_1276	0
22	r_1243	0	r_1283	0
23	r_1244	0.11521	r_1284	0
24	r_1245	4.342508	r_1285	0
25	r_1249	0	r_1286	0
26	r_1250	0	r_1287	0
27	r_1251	0	r_1289	0
28	r_1252	0	r_1291	0
29	r_1253	0	r_1293	0
30	r_1254	0	r_1295	0
31	r_1255	0	r_1296	0
32	r_1256	0	r_1299	0
33	r_1257	0	r_1301	0
34	r_1258	0	r_1302	0
35	r_1259	0	r_1303	0
36	r_1260	0	r_1304	0
37	r_1261	0	r_1305	0
38	r_1262	0	r_1306	0
39	r_1263	0	r_1307	0
40	r_1264	0	r_1308	0
41	r_1265	0.009731	r_1309	0
42	r_1266	0.006801	r_1310	0
43	r_1267	0	r_1311	0
44	r_1268	0	r_1312	0
45	r_1269	0	r_1313	0
46	r_1270	0	r_1314	0
47	r_1271	0	r_1315	0
48	r_1272	0	r_1316	0
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3	r_1274	0 r_1318	0	0
4	r_1275	0 r_1319	0	0
5	r_1276	0 r_1320	0	0
6				
7	r_1277	-3.72208 r_1321	0	1
8	r_1278	0 r_1322	0	0
9	r_1279	-999.986 r_1323	0	1
10	r_1280	999.9604 r_1324	0	1
11	r_1281	-1000 r_1325	0	1
12	r_1282	8.80E-08 r_1326	0	1
13				
14	r_1283	0 r_1327	0	0
15	r_1284	0 r_1328	0	0
16	r_1285	0 r_1329	0	0
17	r_1286	0 r_1330	0	0
18	r_1287	0 r_1331	0	0
19	r_1288	0 r_1332	0	0
20	r_1289	0 r_1333	0	0
21				
22	r_1290	8.80E-08 r_1334	0	1
23	r_1291	0 r_1335	0	0
24	r_1292	0 r_1336	0	0
25	r_1293	0 r_1337	0	0
26				
27	r_1294	8.80E-08 r_1338	0	1
28	r_1295	0 r_1339	0	0
29	r_1296	0 r_1340	0	0
30	r_1297	0 r_1341	0	0
31	r_1299	0 r_1342	0	0
32				
33	r_1300	-1000 r_1343	0	1
34	r_1301	0 r_1344	0	0
35	r_1302	0 r_1345	0	0
36	r_1303	0 r_1346	0	0
37	r_1304	0 r_1347	0	0
38	r_1305	0 r_1348	0	0
39	r_1306	0 r_1349	0	0
40	r_1307	0 r_1350	0	0
41	r_1308	0 r_1351	0	0
42	r_1309	0 r_1352	0	0
43	r_1310	0 r_1353	0	0
44	r_1311	0 r_1354	0	0
45	r_1312	0 r_1355	0	0
46	r_1313	0 r_1657	0	0
47	r_1314	0 r_2079	0	0
48	r_1315	0 r_2132	0	0
49	r_1316	0 r_2219	0	0
50	r_1317	0 r_2220	0	0
51	r_1318	0 r_2221	0	0
52	r_1319	0 r_2222	0	0
53	r_1320	0 r_2223	0	0
54				
55				
56				
57				
58				
59				
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1				
2	r_1321	0 r_2224	0	0
3	r_1322	0 r_2225	0	0
4	r_1323	0 r_2226	0	0
5	r_1324	0 r_2228	0	0
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7	r_1326	0 r_3350	0	0
8	r_1327	0 r_3351	0	0
9	r_1328	0 r_3352	0	0
10	r_1329	0 r_3353	0	0
11	r_1330	0 r_3354	0	0
12	r_1331	0 r_3355	0	0
13	r_1332	0 r_3356	0	0
14	r_1333	0 r_3357	0	0
15	r_1334	0 r_3358	0	0
16	r_1335	0 r_3359	0	0
17	r_1336	0 r_3360	0	0
18	r_1337	0 r_3361	0	0
19	r_1338	0 r_3362	0	0
20	r_1339	0 r_3363	0	0
21	r_1340	0 r_3364	0	0
22	r_1341	0 r_3365	0	0
23	r_1342	0 r_3366	0	0
24	r_1343	0 r_3367	0	0
25	r_1344	0 r_3368	0	0
26	r_1345	0 r_3369	0	0
27	r_1346	0 r_3370	0	0
28	r_1347	0 r_3371	0	0
29	r_1348	0 r_3372	0	0
30	r_1349	0 r_3373	0	0
31	r_1350	0 r_3374	0	0
32	r_1351	0 r_3375	0	0
33	r_1352	0 r_3376	0	0
34	r_1353	0 r_3377	0	0
35	r_1354	0 r_3378	0	0
36	r_1355	0 r_3379	0	0
37	r_1356	0 r_3380	0	0
38	r_1657	0 r_3381	0	0
39	r_2034	0.267408 r_3382	0	1
40	r_2079	0 r_3383	0	0
41	r_2132	0 r_3384	0	0
42	r_2219	0 r_3385	0	0
43	r_2220	0 r_3386	0	0
44	r_2221	0 r_3387	0	0
45	r_2222	0 r_3388	0	0
46	r_2223	0 r_3389	0	0
47	r_2224	0 r_3390	0	0
48	r_2225	0 r_3391	0	0
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2	r_2226	0 r_3392	0	0
3	r_2227	0 r_3393	0	0
4	r_2228	0 r_3394	0	0
5	r_3348	3.79E-05 r_3395	0	1
6	r_3349	0 r_3396	0	0
7	r_3350	0 r_3397	0	0
8	r_3351	0 r_3398	0	0
9	r_3352	0 r_3399	0	0
10	r_3353	0 r_3400	0	0
11	r_3354	0 r_3401	0	0
12	r_3355	0 r_3402	0	0
13	r_3356	0 r_3403	0	0
14	r_3357	0 r_3404	0	0
15	r_3358	0 r_3405	0	0
16	r_3359	0 r_3406	0	0
17	r_3360	0 r_3407	0	0
18	r_3361	0 r_3408	0	0
19	r_3362	0 r_3409	0	0
20	r_3363	0 r_3410	0	0
21	r_3364	0 r_3411	0	0
22	r_3365	0 r_3412	0	0
23	r_3366	0 r_3413	0	0
24	r_3367	0 r_3414	0	0
25	r_3368	0 r_3415	0	0
26	r_3369	0 r_3416	0	0
27	r_3370	0 r_3417	0	0
28	r_3371	0 r_3418	0	0
29	r_3372	0 r_3419	0	0
30	r_3373	0 r_3420	0	0
31	r_3374	0 r_3421	0	0
32	r_3375	0 r_3422	0	0
33	r_3376	0 r_3423	0	0
34	r_3377	0 r_3424	0	0
35	r_3378	0 r_3425	0	0
36	r_3379	0 r_3427	0	0
37	r_3380	0 r_3429	0	0
38	r_3381	0 r_3430	0	0
39	r_3382	0 r_3431	0	0
40	r_3383	0 r_3432	0	0
41	r_3384	0 r_3433	0	0
42	r_3385	0 r_3434	0	0
43	r_3386	0 r_3435	0	0
44	r_3387	0 r_3436	0	0
45	r_3388	0 r_3437	0	0
46	r_3389	0 r_3438	0	0
47	r_3390	0 r_3439	0	0
48	r_3391	0 r_3440	0	0
49				
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3	r_3393	0 r_3442	0	0
4	r_3394	0 r_3443	0	0
5	r_3395	0 r_3444	0	0
6	r_3396	0 r_3445	0	0
7	r_3397	0 r_3446	0	0
8	r_3398	0 r_3447	0	0
9	r_3399	0 r_3448	0	0
10	r_3400	0 r_3449	0	0
11	r_3401	0 r_3450	0	0
12	r_3402	0 r_3451	0	0
13	r_3403	0 r_3452	0	0
14	r_3404	0 r_3453	0	0
15	r_3405	0 r_3454	0	0
16	r_3406	0 r_3455	0	0
17	r_3407	0 r_3456	0	0
18	r_3408	0 r_3457	0	0
19	r_3409	0 r_3458	0	0
20	r_3410	0 r_3459	0	0
21	r_3411	0 r_3460	0	0
22	r_3412	0 r_3461	0	0
23	r_3413	0 r_3462	0	0
24	r_3414	0 r_3463	0	0
25	r_3415	0 r_3464	0	0
26	r_3416	0 r_3465	0	0
27	r_3417	0 r_3466	0	0
28	r_3418	0 r_3467	0	0
29	r_3419	0 r_3468	0	0
30	r_3420	0 r_3469	0	0
31	r_3421	0 r_3470	0	0
32	r_3422	0 r_3471	0	0
33	r_3423	0 r_3472	0	0
34	r_3424	0 r_3473	0	0
35	r_3425	0 r_3474	0	0
36	r_3426	0 r_3475	0	0
37	r_3427	0 r_3476	0	0
38	r_3428	3.79E-05 r_3477	0	1
39	r_3429	0 r_3478	0	0
40	r_3430	0 r_3479	0	0
41	r_3431	0 r_3480	0	0
42	r_3432	0 r_3481	0	0
43	r_3433	0 r_3482	0	0
44	r_3434	0 r_3483	0	0
45	r_3435	0 r_3484	0	0
46	r_3436	0 r_3485	0	0
47	r_3437	0 r_3486	0	0
48	r_3438	0 r_3487	0	0
49				
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58				
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1				
2	r_3439	0 r_3488	0	0
3	r_3440	0 r_3489	0	0
4	r_3441	0 r_3490	0	0
5	r_3442	0 r_3491	0	0
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8	r_3445	0 r_3494	0	0
9	r_3446	0 r_3495	0	0
10	r_3447	0 r_3496	0	0
11	r_3448	0 r_3497	0	0
12	r_3449	0 r_3498	0	0
13	r_3450	0 r_3499	0	0
14	r_3451	0 r_3500	0	0
15	r_3452	0 r_3501	0	0
16	r_3453	0 r_3502	0	0
17	r_3454	0 r_3503	0	0
18	r_3455	0 r_3504	0	0
19	r_3456	0 r_3505	0	0
20	r_3457	0 r_3506	0	0
21	r_3458	0 r_3507	0	0
22	r_3459	0 r_1358	0	0
23	r_3460	0 r_1360	0	0
24	r_3461	0 r_1361	0	0
25	r_3462	0 r_1362	0	0
26	r_3463	0 r_1363	0	0
27	r_3464	0 r_1364	0	0
28	r_3465	0 r_1365	0	0
29	r_3466	0 r_1366	0	0
30	r_3467	0 r_1367	0	0
31	r_3468	0 r_1368	0	0
32	r_3469	0 r_1369	0	0
33	r_3470	0 r_1370	0	0
34	r_3471	0 r_1371	0	0
35	r_3472	0 r_1372	0	0
36	r_3473	0 r_1373	0	0
37	r_3474	0 r_1374	0	0
38	r_3475	0 r_1375	0	0
39	r_3476	0 r_1376	0	0
40	r_3477	0 r_1377	0	0
41	r_3478	0 r_1378	0	0
42	r_3479	0 r_1379	0	0
43	r_3480	0 r_1380	0	0
44	r_3481	0 r_1381	0	0
45	r_3482	0 r_1382	0	0
46	r_3483	0 r_1383	0	0
47	r_3484	0 r_1384	0	0
48	r_3485	0 r_1385	0	0
49				
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1				
2	r_3486	0 r_1386	0	0
3	r_3487	0 r_1387	0	0
4	r_3488	0 r_1388	0	0
5	r_3489	0 r_1389	0	0
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7	r_3491	0 r_1391	0	0
8	r_3492	0 r_1392	0	0
9	r_3493	0 r_1393	0	0
10	r_3494	0 r_1394	0	0
11	r_3495	0 r_1395	0	0
12	r_3496	0 r_1397	0	0
13	r_3497	0 r_1399	0	0
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17	r_3501	0 r_1450	0	0
18	r_3502	0 r_1451	0	0
19	r_3503	0 r_1452	0	0
20	r_3504	0 r_1453	0	0
21	r_3505	0 r_1454	0	0
22	r_3506	0 r_1455	0	0
23	r_3507	0 r_1456	0	0
24	r_1357	0 r_1457	0	0
25	r_1358	0 r_1458	0	0
26	r_1359	3.67E-05 r_1459	0	1
27	r_1360	0 r_1460	0	0
28	r_1361	0 r_1461	0	0
29	r_1362	0 r_1462	0	0
30	r_1363	0 r_1463	0	0
31	r_1364	0 r_1464	0	0
32	r_1365	0 r_1465	0	0
33	r_1366	0 r_1466	0	0
34	r_1367	0 r_1467	0	0
35	r_1368	0 r_1468	0	0
36	r_1369	0 r_1469	0	0
37	r_1370	0 r_1470	0	0
38	r_1371	0 r_1471	0	0
39	r_1372	0 r_1472	0	0
40	r_1373	0 r_1473	0	0
41	r_1374	0 r_1474	0	0
42	r_1375	0 r_1475	0	0
43	r_1376	0 r_1476	0	0
44	r_1377	0 r_1478	0	0
45	r_1378	0 r_1480	0	0
46	r_1379	0 r_1481	0	0
47	r_1380	0 r_1482	0	0
48	r_1381	0 r_1483	0	0
49				
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51				
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1				
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3	r_1383	0 r_1485	0	0
4	r_1384	0 r_1486	0	0
5	r_1385	0 r_1487	0	0
6	r_1386	0 r_1488	0	0
7	r_1387	0 r_1489	0	0
8	r_1388	0 r_1490	0	0
9	r_1389	0 r_1491	0	0
10	r_1390	0 r_1492	0	0
11	r_1391	0 r_1493	0	0
12	r_1392	0 r_1494	0	0
13	r_1393	0 r_1495	0	0
14	r_1394	0 r_1496	0	0
15	r_1395	0 r_1497	0	0
16	r_1396	0 r_1498	0	0
17	r_1397	0 r_1499	0	0
18	r_1398	-1000 r_1500	0	1
19	r_1399	0 r_1501	0	0
20	r_1400	0 r_1502	0	0
21	r_1401	0 r_1503	0	0
22	r_1449	0 r_1504	0	0
23	r_1450	0 r_1505	0	0
24	r_1451	0 r_1506	0	0
25	r_1452	0 r_1507	0	0
26	r_1453	0 r_1508	0	0
27	r_1454	0 r_1509	0	0
28	r_1455	0 r_1510	0	0
29	r_1456	0 r_1511	0	0
30	r_1457	0 r_1512	0	0
31	r_1458	0 r_1513	0	0
32	r_1459	0 r_1514	0	0
33	r_1460	0 r_1515	0	0
34	r_1461	0 r_1516	0	0
35	r_1462	0 r_1517	0	0
36	r_1463	0 r_1518	0	0
37	r_1464	0 r_1519	0	0
38	r_1465	0 r_1520	0	0
39	r_1466	0 r_1521	0	0
40	r_1467	0 r_1522	0	0
41	r_1468	0 r_1523	0	0
42	r_1469	0 r_1524	0	0
43	r_1470	0 r_1525	0	0
44	r_1471	0 r_1526	0	0
45	r_1472	0 r_1527	0	0
46	r_1473	0 r_1528	0	0
47	r_1474	0 r_1529	0	0
48	r_1475	0 r_1530	0	0
49				
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3	r_1477	0 r_1532	0	0
4	r_1478	0 r_1533	0	0
5	r_1479	3.79E-05 r_1534	0	1
6	r_1480	0 r_1535	0	0
7	r_1481	0 r_1536	0	0
8	r_1482	0 r_1538	0	0
9	r_1483	0 r_3964	0	0
10	r_1483	0 r_3964	0	0
11	r_1484	0 r_3965	0	0
12	r_1485	0 r_3966	0	0
13	r_1485	0 r_3966	0	0
14	r_1486	0 r_3967	0	0
15	r_1487	0 r_3968	0	0
16	r_1488	0 r_3969	0	0
17	r_1489	0 r_3971	0	0
18	r_1490	0 r_3974	0	0
19	r_1490	0 r_3974	0	0
20	r_1491	0 r_3976	0	0
21	r_1492	0 r_3978	0	0
22	r_1493	0 r_3980	0	0
23	r_1494	0 r_3981	0	0
24	r_1494	0 r_3981	0	0
25	r_1495	0 r_3982	0	0
26	r_1496	0 r_3983	0	0
27	r_1497	0 r_3984	0	0
28	r_1498	0 r_3986	0	0
29	r_1499	0 r_3989	0	0
30	r_1499	0 r_3989	0	0
31	r_1500	0 r_3990	0	0
32	r_1501	0 r_3991	0	0
33	r_1502	0 r_3992	0	0
34	r_1503	0 r_3993	0	0
35	r_1504	0 r_3995	0	0
36	r_1504	0 r_3995	0	0
37	r_1505	0 r_3998	0	0
38	r_1506	0 r_3999	0	0
39	r_1507	0 r_4000	0	0
40	r_1508	0 r_4001	0	0
41	r_1508	0 r_4001	0	0
42	r_1509	0 r_4002	0	0
43	r_1510	0 r_4004	0	0
44	r_1511	0 r_4007	0	0
45	r_1512	0 r_4008	0	0
46	r_1513	0 r_4009	0	0
47	r_1513	0 r_4009	0	0
48	r_1514	0 r_4010	0	0
49	r_1515	0 r_4011	0	0
50	r_1516	0 r_4012	0	0
51	r_1517	0 r_4013	0	0
52	r_1518	0 r_4014	0	0
53	r_1518	0 r_4014	0	0
54	r_1519	0 r_4015	0	0
55	r_1520	0 r_4016	0	0
56	r_1521	0 r_4017	0	0
57	r_1522	0 r_4018	0	0
58	r_1522	0 r_4018	0	0
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3	r_1524	0	r_4020	0
4	r_1525	0	r_4021	0
5	r_1526	0	r_4022	0
6	r_1527	0	r_4023	0
7	r_1528	0	r_4024	0
8	r_1529	0	r_4025	0
9	r_1530	0	r_4026	0
10	r_1531	0	r_4027	0
11	r_1532	0	r_4028	0
12	r_1533	0	r_4029	0
13	r_1534	0	r_4030	0
14	r_1535	0	r_4031	0
15	r_1536	0	r_4032	0
16	r_1537	0	r_4033	0
17	r_1538	0	r_4034	0
18	r_3963	0.000207	r_4035	1
19	r_3964	0	r_4036	0
20	r_3965	0	r_1542	0
21	r_3966	0	r_1545	0
22	r_3967	0	r_1546	0
23	r_3968	0	r_1547	0
24	r_3969	0	r_1548	0
25	r_3970	0	r_1549	0
26	r_3971	0	r_1550	0
27	r_3972	7.14E-05	r_1551	1
28	r_3974	0	r_1552	0
29	r_3975	2.95E-05	r_1553	1
30	r_3976	0	r_1554	0
31	r_3977	0	r_1560	0
32	r_3978	0	r_1562	0
33	r_3979	5.24E-05	r_1563	1
34	r_3980	0	r_1564	0
35	r_3981	0	r_1566	0
36	r_3982	0	r_1568	0
37	r_3983	0	r_1573	0
38	r_3984	0	r_1575	0
39	r_3985	0	r_1576	0
40	r_3986	0	r_1577	0
41	r_3988	0.00038	r_1578	1
42	r_3989	0	r_1579	0
43	r_3990	0	r_1580	0
44	r_3991	0	r_1581	0
45	r_3992	0	r_1583	0
46	r_3993	0	r_1587	0
47	r_3994	0	r_1589	0
48	r_3995	0	r_1597	0
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3	r_3998	0	r_1599	0 0
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5	r_4000	0	r_1601	0 0
6	r_4001	0	r_1603	0 0
7	r_4002	0	r_1604	0 0
8	r_4003	0	r_1605	0 0
9	r_4004	0	r_1606	0 0
10	r_4006	0.000109	r_1607	0 1
11	r_4007	0	r_1608	0 0
12	r_4008	0	r_1609	0 0
13	r_4009	0	r_1610	0 0
14	r_4010	0	r_1611	0 0
15	r_4011	0	r_1613	0 0
16	r_4012	0	r_1614	0 0
17	r_4013	0	r_1615	0 0
18	r_4014	0	r_1616	0 0
19	r_4015	0	r_1617	0 0
20	r_4016	0	r_1620	0 0
21	r_4017	0	deleted	0 0
22	r_4018	0	r_1623	0 0
23	r_4019	0	r_1624	0 0
24	r_4020	0	r_1625	0 0
25	r_4021	0	r_1627	0 0
26	r_4022	0	r_1628	0 0
27	r_4023	0	r_1630	0 0
28	r_4024	0	r_1631	0 0
29	r_4025	0	r_1633	0 0
30	r_4026	0	r_1634	0 0
31	r_4027	0	r_1635	0 0
32	r_4028	0	r_1637	0 0
33	r_4029	0	r_1638	0 0
34	r_4030	0	r_1639	0 0
35	r_4031	0	r_1640	0 0
36	r_4032	0	r_1641	0 0
37	r_4033	0	r_1642	0 0
38	r_4034	0	r_1643	0 0
39	r_4035	0	r_1644	0 0
40	r_4036	0	r_1645	0 0
41	r_4037	0	r_1647	0 0
42	r_1542	0	r_1648	0 0
43	r_1543	0.09984	r_1651	0 1
44	r_1545	0	r_1656	0 0
45	r_1546	0	r_1658	0 0
46	r_1547	0	r_1659	0 0
47	r_1548	0	r_1660	0 0
48	r_1549	0	r_1664	0 0
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3	r_1551	0	r_1674	0
4	r_1552	0	r_1675	0
5	r_1553	0	r_1677	0
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7	r_1560	0	r_1680	0
8	r_1562	0	r_1681	0
9	r_1563	0	r_1683	0
10	r_1564	0	r_1684	0
11	r_1565	0	r_1685	0
12	r_1566	0	r_1686	0
13	r_1567	-0.03838	r_1687	0
14	r_1568	0	r_1690	0
15	r_1572	0	r_1699	0
16	r_1573	0	r_1700	0
17	r_1574	-0.02608	r_1702	0
18	r_1575	0	r_1703	0
19	r_1576	0	r_1706	0
20	r_1577	0	r_1707	0
21	r_1578	0	r_1709	0
22	r_1579	0	r_1710	0
23	r_1580	0	r_1712	0
24	r_1581	0	r_1713	0
25	r_1582	0	r_1715	0
26	r_1583	0	r_1716	0
27	r_1585	0.000581	r_1717	0
28	r_1586	0	r_1718	0
29	r_1587	0	r_1719	0
30	r_1588	1000	r_1720	0
31	r_1589	0	r_1721	0
32	r_1590	0	r_1722	0
33	r_1591	0	r_1723	0
34	r_1595	0.026077	r_1724	0
35	r_1596	-0.01695	r_1725	0
36	r_1597	0	r_1727	0
37	r_1598	0	r_1728	0
38	r_1599	0	r_1730	0
39	r_1600	0	r_1731	0
40	r_1601	0	r_1732	0
41	r_1603	0	r_1733	0
42	r_1604	0	r_1734	0
43	r_1605	0	r_1735	0
44	r_1606	0	r_1736	0
45	r_1607	0	r_1737	0
46	r_1608	0	r_1738	0
47	r_1609	0	r_1739	0
48	r_1610	0	r_1743	0
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2	r_1611	0 r_1744	0	0
3	r_1613	0 r_1746	0	0
4	r_1614	0 r_1747	0	0
5	r_1615	0 r_1749	0	0
6	r_1616	0 r_1750	0	0
7	r_1617	0 r_1752	0	0
8	r_1618	0 r_1759	0	0
9	r_1618	0 r_1759	0	0
10	r_1620	0 r_1760	-1000	1
11	r_1622	-7.04E-07 r_1761	0	1
12	r_1623	0 r_1762	0	0
13	r_1623	0 r_1762	0	0
14	r_1624	0 r_1764	0	0
15	r_1625	0 r_1765	0	0
16	r_1627	0 r_1770	0	0
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18	r_1629	0 r_1772	0	0
19	r_1629	0 r_1772	0	0
20	r_1630	0 r_1774	0	0
21	r_1631	0 r_1775	0	0
22	r_1632	-1000 r_1776	0	1
23	r_1633	0 r_1777	0	0
24	r_1634	0 r_1788	0	0
25	r_1634	0 r_1788	0	0
26	r_1635	0 r_1790	0	0
27	r_1637	0 r_1791	0	0
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32	r_1641	0 r_1795	0	0
33	r_1642	0 r_1796	0	0
34	r_1643	0 r_1798	0	0
35	r_1644	0 r_1802	0	0
36	r_1644	0 r_1802	0	0
37	r_1645	0 r_1805	0	0
38	r_1647	0 r_1806	0	0
39	r_1648	0 r_1807	0	0
40	r_1649	0 r_1809	0	0
41	r_1649	0 r_1809	0	0
42	r_1650	0 r_1810	0	0
43	r_1651	0 r_1812	0	0
44	r_1652	1000 r_1813	0	1
45	r_1654	-0.59774 r_1814	0	1
46	r_1656	0 r_1815	0	0
47	r_1658	0 r_1816	0	0
48	r_1658	0 r_1816	0	0
49	r_1659	0 r_1817	0	0
50	r_1660	0 r_1818	0	0
51	r_1661	0 r_1819	0	0
52	r_1663	0 r_1820	0	0
53	r_1663	0 r_1820	0	0
54	r_1664	0 r_1823	0	0
55	r_1665	1000 r_1826	0	1
56	r_1667	-999.789 r_1830	0	1
57	r_1668	0 r_1833	0	0
58	r_1668	0 r_1833	0	0
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2	r_1669	-1000 r_1834	0	1
3	r_1671	0 r_1835	0	0
4	r_1672	1.963804 r_1837	0	1
5	r_1673	0 r_1839	0	0
6	r_1674	0 r_1841	0	0
7	r_1675	0 r_1842	0	0
8	r_1676	-3.79E-05 r_1843	0	1
9	r_1677	0 r_1844	0	0
10	r_1678	0 r_1845	0	0
11	r_1679	0 r_1846	0	0
12	r_1680	0 r_1847	0	0
13	r_1681	0 r_1848	0	0
14	r_1682	0.000575 r_1849	0	1
15	r_1683	0 r_1850	0	0
16	r_1684	0 r_1851	0	0
17	r_1685	0 r_1852	0	0
18	r_1686	0 r_1853	0	0
19	r_1687	0 r_1854	0	0
20	r_1688	0 r_1855	0	0
21	r_1689	0 r_1856	0	0
22	r_1690	0 r_1857	0	0
23	r_1691	-3.79E-05 r_1859	0	1
24	r_1694	-1000 r_1860	0	1
25	r_1695	0 r_1862	0	0
26	r_1696	-0.93273 r_1863	0	1
27	r_1697	1.963804 r_1864	0	1
28	r_1698	-3.79E-05 r_1865	0	1
29	r_1699	0 r_1866	0	0
30	r_1700	0 r_1867	0	0
31	r_1701	3.67E-05 r_1868	0	1
32	r_1702	0 r_1869	0	0
33	r_1703	0 r_1870	0	0
34	r_1704	-0.00049 r_1871	0	1
35	r_1705	0 r_1872	0	0
36	r_1706	0 r_1873	0	0
37	r_1707	0 r_1874	0	0
38	r_1708	0.038377 r_1875	0	1
39	r_1709	0 r_1876	0	0
40	r_1710	0 r_1877	0	0
41	r_1711	0 r_1878	0	0
42	r_1712	0 r_1879	0	0
43	r_1713	0 r_1880	0	0
44	r_1714	-1 r_1881	0	1
45	r_1715	0 r_1882	0	0
46	r_1716	0 r_1883	0	0
47	r_1717	0 r_1885	0	0
48	r_1718	0 r_1886	0	0
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2	r_1719	0	r_1889	0
3	r_1720	0	r_1890	0
4	r_1721	0	r_1891	0
5	r_1722	0	r_1892	0
6	r_1723	0	r_1893	0
7	r_1724	0	r_1895	0
8	r_1725	0	r_1896	0
9	r_1726	0	r_1897	0
10	r_1727	0	r_1899	0
11	r_1728	0	r_1900	0
12	r_1729	-0.00032	r_1902	0
13	r_1730	0	r_1903	0
14	r_1731	0	r_1905	0
15	r_1732	0	r_1906	0
16	r_1733	0	r_1908	0
17	r_1734	0	r_1909	0
18	r_1735	0	r_1910	0
19	r_1736	0	r_1911	0
20	r_1737	0	r_1912	0
21	r_1738	0	r_1913	0
22	r_1739	0	r_1914	0
23	r_1743	0	r_1915	0
24	r_1744	0	r_1916	0
25	r_1745	0	r_1919	0
26	r_1746	0	r_1920	0
27	r_1747	0	r_1921	0
28	r_1748	-0.07108	r_1922	0
29	r_1749	0	r_1923	0
30	r_1750	0	r_1924	0
31	r_1751	0	r_1925	0
32	r_1752	0	r_1926	0
33	r_1753	0	r_1927	0
34	r_1754	0.000564	r_1928	0
35	r_1757	0	r_1930	0
36	r_1758	1000	r_1931	0
37	r_1759	0	r_1935	0
38	r_1760	-1000	r_1936	0
39	r_1761	0	r_1937	0
40	r_1762	0	r_1938	0
41	r_1763	-1000	r_1939	0
42	r_1764	0	r_1940	0
43	r_1765	0	r_1941	0
44	r_1766	8.80E-08	r_1942	0
45	r_1770	0	r_1943	0
46	r_1771	0	r_1944	0
47	r_1772	0	r_1945	0
48	r_1774	0	r_1966	0
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2	r_1775	0	r_1967	0
3	r_1776	0	r_1968	0
4	r_1777	0	r_1970	0
5	r_1788	0	r_1971	0
6	r_1790	0	r_1972	0
7	r_1791	0	r_1980	0
8	r_1792	0	r_1981	0
9	r_1793	0	r_1984	0
10	r_1794	0	r_1987	0
11	r_1795	0	r_1988	0
12	r_1796	0	r_1990	0
13	r_1797	0	r_1991	0
14	r_1798	0	r_1993	0
15	r_1800	0	r_1994	0
16	r_1801	3.79E-05	r_1996	0
17	r_1802	0	r_1997	0
18	r_1803	3.79E-05	r_1998	0
19	r_1805	0	r_1999	0
20	r_1806	0	r_2000	0
21	r_1807	0	r_2001	0
22	r_1808	0	r_2003	0
23	r_1809	0	r_2004	0
24	r_1810	0	r_2008	0
25	r_1811	1.136965	r_2020	0
26	r_1812	0	r_2023	0
27	r_1813	0	r_2024	0
28	r_1814	0	r_2025	0
29	r_1815	0	r_2027	0
30	r_1816	0	r_2031	0
31	r_1817	0	r_2033	0
32	r_1818	0	r_2036	0
33	r_1819	0	r_2037	0
34	r_1820	0	r_2038	0
35	r_1821	0	r_2039	0
36	r_1822	0	r_2040	0
37	r_1823	0	r_2041	0
38	r_1824	-0.34861	r_2043	0
39	r_1825	-0.06984	r_2044	0
40	r_1826	0	r_2046	0
41	r_1827	0	r_2049	0
42	r_1829	-1000	r_2052	0
43	r_1830	0	r_2055	0
44	r_1831	1000	r_2057	0
45	r_1832	0.233403	r_2058	0
46	r_1833	0	r_2061	0
47	r_1834	0	r_2062	0
48	r_1835	0	r_2063	0
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3	r_1837	0 r_2065	0	0
4	r_1839	0 r_2066	0	0
5	r_1840	-0.00362 r_2067	0	1
6	r_1841	0 r_2068	0	0
7	r_1842	0 r_2070	0	0
8	r_1843	0 r_2071	0	0
9	r_1844	0 r_2073	0	0
10	r_1845	0 r_2074	0	0
11	r_1846	0 r_2075	0	0
12	r_1847	0 r_2080	0	0
13	r_1848	0 r_2082	0	0
14	r_1849	0 r_2083	0	0
15	r_1850	0 r_2084	0	0
16	r_1851	0 r_2085	0	0
17	r_1852	0 r_2086	0	0
18	r_1853	0 r_2087	0	0
19	r_1854	0 r_2089	0	0
20	r_1855	0 r_2092	0	0
21	r_1856	0 r_2095	0	0
22	r_1857	0 r_2098	0	0
23	r_1858	0 r_2099	0	0
24	r_1859	0 r_2101	0	0
25	r_1860	0 r_2102	0	0
26	r_1861	-8.80E-08 r_2103	0	1
27	r_1862	0 r_2104	0	0
28	r_1863	0 r_2106	0	0
29	r_1864	0 r_2110	0	0
30	r_1865	0 r_2129	0	0
31	r_1866	0 r_2133	0	0
32	r_1867	0 r_2134	0	0
33	r_1868	0 r_2136	0	0
34	r_1869	0 r_2137	0	0
35	r_1870	0 r_2139	0	0
36	r_1871	0 r_2184	0	0
37	r_1872	0 r_2185	0	0
38	r_1873	0 r_2186	0	0
39	r_1874	0 r_2187	0	0
40	r_1875	0 r_2188	0	0
41	r_1876	0 r_2189	0	0
42	r_1877	0 r_2190	0	0
43	r_1878	0 r_2191	0	0
44	r_1879	0 r_2192	0	0
45	r_1880	0 r_2193	0	0
46	r_1881	0 r_2229	0	0
47	r_1882	0 r_2230	0	0
48	r_1883	0 r_2231	0	0
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2	r_1884	0	r_2812	0
3	r_1885	0	r_2813	0
4	r_1886	0	r_2814	0
5	r_1887	0.01449	r_2815	1
6	r_1889	0	r_2816	0
7	r_1890	0	r_2817	0
8	r_1891	0	r_2818	0
9	r_1892	0	r_2819	0
10	r_1893	0	r_3332	0
11	r_1895	0	r_3333	0
12	r_1896	0	r_3334	0
13	r_1897	0	r_3335	0
14	r_1898	0	r_3336	0
15	r_1899	0	r_3337	0
16	r_1900	0	r_3338	0
17	r_1901	-1000	r_3339	1
18	r_1902	0	r_3340	0
19	r_1903	0	r_3341	0
20	r_1904	0	r_3342	0
21	r_1905	0	r_3343	0
22	r_1906	0	r_3344	0
23	r_1907	3.79E-05	r_3345	1
24	r_1908	0	r_3346	0
25	r_1909	0	r_3516	1000
26	r_1910	0	r_3539	0
27	r_1911	0	r_3550	0
28	r_1912	0	r_3553	0
29	r_1913	0	r_3555	0
30	r_1914	0	r_3556	0
31	r_1915	0	r_3557	0
32	r_1916	0	r_3558	0
33	r_1919	0	r_3560	0
34	r_1920	0	r_3561	0
35	r_1921	0	r_3563	0
36	r_1922	0	r_3564	0
37	r_1923	0	r_3565	0
38	r_1924	0	r_3566	0
39	r_1925	0	r_3567	0
40	r_1926	0	r_3572	1000
41	r_1927	0	r_3581	0
42	r_1928	0	r_3589	0
43	r_1929	0	r_3590	0
44	r_1930	0	r_3591	0
45	r_1931	0	r_3592	0
46	r_1932	-0.07108	r_3593	1
47	r_1935	0	r_3594	0
48	r_1936	0	r_3595	0
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2	r_1937	0 r_3598	0	0
3	r_1938	0 r_3601	0	0
4	r_1939	0 r_3602	0	0
5	r_1940	0 r_3603	0	0
6	r_1941	0 r_3604	0	0
7	r_1942	0 r_3605	0	0
8	r_1943	0 r_3606	0	0
9	r_1944	0 r_3607	0	0
10	r_1945	0 r_3608	0	0
11	r_1946	0 r_3609	0	0
12	r_1947	0 r_3610	0	0
13	r_1952	0 r_3611	0	0
14	r_1952	0 r_3611	0	0
15	r_1963	-0.0012 r_3612	0	1
16	r_1964	0.001205 r_3613	0	1
17	r_1965	-0.58486 r_3614	0	1
18	r_1966	0 r_3615	0	0
19	r_1967	0 r_3616	0	0
20	r_1968	0 r_3617	0	0
21	r_1970	0 r_3618	0	0
22	r_1971	0 r_3619	0	0
23	r_1972	0 r_3620	0	0
24	r_1974	0 r_3621	0	0
25	r_1975	0 r_3622	0	0
26	r_1976	0 r_3623	0	0
27	r_1977	0.000603 r_3624	0	1
28	r_1978	1.909946 r_3625	0	1
29	r_1979	1.962779 r_3626	0	1
30	r_1980	0 r_3627	0	0
31	r_1981	0 r_3628	0	0
32	r_1984	0 r_3629	0	0
33	r_1987	0 r_3630	0	0
34	r_1988	0 r_3631	0	0
35	r_1989	0 r_3632	0	0
36	r_1990	0 r_3633	0	0
37	r_1991	0 r_3634	0	0
38	r_1992	-1.96278 r_3635	0	1
39	r_1993	0 r_3636	0	0
40	r_1994	0 r_3637	0	0
41	r_1995	3.79E-05 r_3638	0	1
42	r_1996	0 r_3639	0	0
43	r_1997	0 r_3640	0	0
44	r_1998	0 r_3641	0	0
45	r_1999	0 r_3642	0	0
46	r_2000	0 r_3643	0	0
47	r_2001	0 r_3644	0	0
48	r_2002	0 r_3645	0	0
49	r_2003	0 r_3646	0	0
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3	r_2005	-0.11521 r_3648	0	1
4	r_2008	0 r_3649	0	0
5	r_2020	0 r_3650	0	0
6	r_2022	8.80E-08 r_3651	0	1
7	r_2023	0 r_3652	0	0
8	r_2024	0 r_3653	0	0
9	r_2025	0 r_3654	0	0
10	r_2026	0 r_3655	0	0
11	r_2027	0 r_3656	0	0
12	r_2028	0 r_3657	0	0
13	r_2030	8.71E-05 r_3658	0	1
14	r_2031	0 r_3661	0	0
15	r_2032	0.830825 r_3664	0	1
16	r_2033	0 r_3665	0	0
17	r_2036	0 r_3667	0	0
18	r_2037	0 r_3668	0	0
19	r_2038	0 r_3670	0	0
20	r_2039	0 r_3671	0	0
21	r_2040	0 r_3672	0	0
22	r_2041	0 r_3673	0	0
23	r_2042	0 r_3674	0	0
24	r_2043	0 r_3675	0	0
25	r_2044	0 r_3676	0	0
26	r_2045	-0.56848 r_3677	0	1
27	r_2046	0 r_3686	0	0
28	r_2049	0 r_3687	0	0
29	r_2050	0 r_3688	0	0
30	r_2051	0 r_3689	0	0
31	r_2052	0 r_3690	0	0
32	r_2053	0.000603 r_3691	0	1
33	r_2054	0.000603 r_3692	0	1
34	r_2055	0 r_3693	0	0
35	r_2056	0 r_3694	0	0
36	r_2057	0 r_3695	0	0
37	r_2058	0 r_3696	0	0
38	r_2060	-0.0068 r_3697	0	1
39	r_2061	0 r_3698	0	0
40	r_2062	0 r_3699	0	0
41	r_2063	0 r_3700	0	0
42	r_2064	0 r_3701	0	0
43	r_2065	0 r_3702	0	0
44	r_2066	0 r_3703	0	0
45	r_2067	0 r_3704	0	0
46	r_2068	0 r_3705	0	0
47	r_2069	0 r_3706	0	0
48	r_2070	0 r_3707	0	0
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3	r_2072	0.016373	r_3709	0
4	r_2073	0	r_3710	0
5	r_2074	0	r_3711	0
6	r_2075	0	r_3712	0
7	r_2080	0	r_3713	0
8	r_2082	0	r_3714	0
9	r_2083	0	r_3715	0
10	r_2084	0	r_3716	0
11	r_2085	0	r_3717	0
12	r_2086	0	r_3718	0
13	r_2087	0	r_3719	0
14	r_2089	0	r_3720	0
15	r_2090	0	r_3721	0
16	r_2091	0	r_3722	0
17	r_2092	0	r_3723	0
18	r_2093	999.9767	r_3724	0
19	r_2094	-0.0006	r_3725	0
20	r_2095	0	r_3726	0
21	r_2096	-8.37517	r_3727	0
22	r_2097	1000	r_3728	0
23	r_2098	0	r_3729	0
24	r_2099	0	r_3730	0
25	r_2100	3.722078	r_3731	0
26	r_2101	0	r_3732	0
27	r_2102	0	r_3733	0
28	r_2103	0	r_3734	0
29	r_2104	0	r_3735	0
30	r_2105	0	r_3736	0
31	r_2106	0	r_3737	0
32	r_2107	0	r_3738	0
33	r_2108	0.08798	r_3739	0
34	r_2110	0	r_3740	0
35	r_2111	0.08798	r_3741	0
36	r_2125	999.998	r_3742	0
37	r_2129	0	r_3743	0
38	r_2133	0	r_3744	0
39	r_2134	0	r_3745	0
40	r_2136	0	r_3746	0
41	r_2137	0	r_3747	0
42	r_2139	0	r_3748	0
43	r_2184	0	r_3749	0
44	r_2185	0	r_3750	0
45	r_2186	0	r_3751	0
46	r_2187	0	r_3752	0
47	r_2188	0	r_3753	0
48	r_2189	0	r_3754	0
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2	r_2190	0 r_3755	0	0
3	r_2191	0 r_3756	0	0
4	r_2192	0 r_3757	0	0
5	r_2193	0 r_3758	0	0
6	r_2229	0 r_3759	0	0
7	r_2230	0 r_3760	0	0
8	r_2231	0 r_3761	0	0
9	r_2812	0 r_3763	0	0
10	r_2813	0 r_3764	0	0
11	r_2814	0 r_3766	0	0
12	r_2815	0 r_3767	0	0
13	r_2816	0 r_3768	0	0
14	r_2817	0 r_3769	0	0
15	r_2818	0 r_3771	0	0
16	r_2819	0 r_3772	0	0
17	r_3332	0 r_3774	0	0
18	r_3333	0 r_3775	0	0
19	r_3334	0 r_3776	0	0
20	r_3335	0 r_3777	0	0
21	r_3336	0 r_3778	0	0
22	r_3337	0 r_3780	0	0
23	r_3338	0 r_3787	0	0
24	r_3339	0 r_3790	0	0
25	r_3340	0 r_3791	0	0
26	r_3341	0 r_3792	0	0
27	r_3342	0 r_3793	0	0
28	r_3343	0 r_3795	0	0
29	r_3344	0 r_3796	0	0
30	r_3345	0 r_3798	0	0
31	r_3346	0 r_3799	0	0
32	r_3347	0 r_3800	0	0
33	r_3508	0 r_3801	0	0
34	r_3509	0 r_3803	0	0
35	r_3510	999.9999 r_3804	0	1
36	r_3511	-1000 r_3806	0	1
37	r_3512	-1000 r_3807	0	1
38	r_3513	0.001939 r_3808	0	1
39	r_3514	0.000114 r_3809	0	1
40	r_3515	-1000 r_3810	0	1
41	r_3516	1000 r_3811	0	1
42	r_3517	-999.998 r_3812	0	1
43	r_3518	1000 r_3813	0	1
44	r_3519	1000 r_3814	0	1
45	r_3520	-0.00194 r_3815	0	1
46	r_3521	0 r_3816	0	0
47	r_3522	0 r_3817	0	0
48	r_3523	-1000 r_3818	0	1
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2	r_3524	1000 r_3819	0	1
3	r_3525	0.000116 r_3820	0	1
4	r_3526	-0.00194 r_3821	0	1
5	r_3527	-0.00011 r_3822	0	1
6	r_3528	-1000 r_3823	0	1
7	r_3529	0.000227 r_3824	0	1
8	r_3530	-0.00023 r_3825	0	1
9	r_3531	0.000915 r_3826	0	1
10	r_3531	0.000915 r_3826	0	1
11	r_3532	0.000915 r_3827	0	1
12	r_3532	0.000915 r_3827	0	1
13	r_3533	-0.00091 r_3828	0	1
14	r_3534	0.000843 r_3829	0	1
15	r_3535	0 r_3830	0	0
16	r_3536	999.9973 r_3831	0	1
17	r_3537	0 r_3832	0	0
18	r_3538	0.00081 r_3833	0	1
19	r_3538	0.00081 r_3833	0	1
20	r_3539	0 r_3834	0	0
21	r_3540	-0.00081 r_3835	0	1
22	r_3541	0 r_3836	0	0
23	r_3542	0 r_3837	0	0
24	r_3542	0 r_3837	0	0
25	r_3543	-999.998 r_3838	0	1
26	r_3544	999.9981 r_3839	0	1
27	r_3545	0.000527 r_3840	0	1
28	r_3546	0.000283 r_3841	0	1
29	r_3547	0.00114 r_3842	0	1
30	r_3547	0.00114 r_3842	0	1
31	r_3548	-0.00114 r_3843	0	1
32	r_3549	0 r_3844	0	0
33	r_3550	0 r_3845	0	0
34	r_3551	0 r_3846	0	0
35	r_3551	0 r_3846	0	0
36	r_3552	999.9995 r_3847	0	1
37	r_3553	0 r_3848	0	0
38	r_3554	-0.00011 r_3849	0	1
39	r_3555	0 r_3850	0	0
40	r_3556	0 r_3851	0	0
41	r_3556	0 r_3851	0	0
42	r_3557	0 r_3852	0	0
43	r_3558	0 r_3853	0	0
44	r_3559	0 r_3854	0	0
45	r_3560	0 r_3855	0	0
46	r_3561	0 r_3856	0	0
47	r_3561	0 r_3856	0	0
48	r_3562	-0.00021 r_3857	0	1
49	r_3563	0 r_3858	0	0
50	r_3564	0 r_3859	0	0
51	r_3565	0 r_3860	0	0
52	r_3566	0 r_3861	0	0
53	r_3566	0 r_3861	0	0
54	r_3567	0 r_3862	0	0
55	r_3568	0 r_3863	0	0
56	r_3569	0 r_3864	0	0
57	r_3570	0 r_3865	0	0
58	r_3570	0 r_3865	0	0
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2	r_3571	-1000 r_3866	0	1
3	r_3572	1000 r_3867	0	1
4	r_3573	999.9999 r_3868	0	1
5	r_3574	-0.00194 r_3869	0	1
6	r_3575	1000 r_3870	0	1
7	r_3576	-1000 r_3871	0	1
8	r_3577	1000 r_3872	0	1
9	r_3578	-1000 r_3873	0	1
10	r_3579	-1000 r_3874	0	1
11	r_3580	0.001939 r_3875	0	1
12	r_3581	0 r_3876	0	0
13	r_3582	0 r_3877	0	0
14	r_3583	0 r_3878	0	0
15	r_3584	0 r_3879	0	0
16	r_3585	999.9981 r_3880	0	1
17	r_3586	-999.998 r_3881	0	1
18	r_3587	-999.998 r_3882	0	1
19	r_3588	0.000109 r_3883	0	1
20	r_3589	0 r_3884	0	0
21	r_3590	0 r_3885	0	0
22	r_3591	0 r_3886	0	0
23	r_3592	0 r_3887	0	0
24	r_3593	0 r_3888	0	0
25	r_3594	0 r_3889	0	0
26	r_3595	0 r_3890	0	0
27	r_3596	0 r_3891	0	0
28	r_3597	0 r_3892	0	0
29	r_3598	0 r_3893	0	0
30	r_3599	-1000 r_3894	0	1
31	r_3600	1000 r_3895	0	1
32	r_3601	0 r_3896	0	0
33	r_3602	0 r_3897	0	0
34	r_3603	0 r_3898	0	0
35	r_3604	0 r_3899	0	0
36	r_3605	0 r_3900	0	0
37	r_3606	0 r_3901	0	0
38	r_3607	0 r_3902	0	0
39	r_3608	0 r_3903	0	0
40	r_3609	0 r_3904	0	0
41	r_3610	0 r_3905	0	0
42	r_3611	0 r_3906	0	0
43	r_3612	0 r_3907	0	0
44	r_3613	0 r_3908	0	0
45	r_3614	0 r_3909	0	0
46	r_3615	0 r_3910	0	0
47	r_3616	0 r_3911	0	0
48	r_3617	0 r_3912	0	0
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2	r_3618	0 r_3913	0	0
3	r_3619	0 r_3914	0	0
4	r_3620	0 r_3915	0	0
5	r_3621	0 r_3916	0	0
6	r_3622	0 r_3917	0	0
7	r_3623	0 r_3918	0	0
8	r_3624	0 r_3919	0	0
9	r_3625	0 r_3920	0	0
10	r_3626	0 r_3921	0	0
11	r_3627	0 r_3922	0	0
12	r_3628	0 r_3923	0	0
13	r_3629	0 r_3924	0	0
14	r_3630	0 r_3925	0	0
15	r_3631	0 r_3926	0	0
16	r_3632	0 r_3927	0	0
17	r_3633	0 r_3928	0	0
18	r_3634	0 r_3929	0	0
19	r_3635	0 r_3930	0	0
20	r_3636	0 r_3931	0	0
21	r_3637	0 r_3932	0	0
22	r_3638	0 r_3933	0	0
23	r_3639	0 r_3935	0	0
24	r_3640	0 r_3938	0	0
25	r_3641	0 r_3940	0	0
26	r_3642	0 r_3941	0	0
27	r_3643	0 r_3942	0	0
28	r_3644	0 r_3943	0	0
29	r_3645	0 r_3944	0	0
30	r_3646	0 r_3945	0	0
31	r_3647	0 r_3946	0	0
32	r_3648	0 r_3947	0	0
33	r_3649	0 r_3948	0	0
34	r_3650	0 r_3949	0	0
35	r_3651	0 r_3950	0	0
36	r_3652	0 r_3951	0	0
37	r_3653	0 r_3952	0	0
38	r_3654	0 r_3953	0	0
39	r_3655	0 r_3955	0	0
40	r_3656	0 r_3956	0	0
41	r_3657	0 r_3958	0	0
42	r_3658	0 r_3959	0	0
43	r_3659	0 r_4043	0	0
44	r_3660	0 r_4044	0	0
45	r_3661	0 r_1109	0	0
46	r_3662	3.33E-05 r_1110	6.042536	1
47	r_3663	-3.33E-05 r_1111	0	1
48	r_3664	0 r_1112	-1000	1
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2	r_3665	0 r_1114	0	0
3	r_3666	0 r_1115	0.597736	1
4	r_3667	0 r_1116	0	0
5	r_3668	0 r_1118	999.8667	1
6	r_3669	-0.00047 r_1125	0	1
7	r_3670	0 r_1126	-999.956	1
8	r_3671	0 r_1127	-0.03838	1
9	r_3672	0 r_1128	-1000	1
10	r_3673	0 r_1129	0.003616	1
11	r_3674	0 r_1147	0	0
12	r_3675	0 r_1148	-1000	1
13	r_3676	0 r_1165	0	0
14	r_3677	0 r_1166	1	1
15	r_3678	0 r_1192	0	0
16	r_3679	0 r_1194	0.067006	1
17	r_3680	0 r_1218	0	0
18	r_3681	-1000 r_1220	-1000	0
19	r_3682	1000 r_1222	1000	0
20	r_3683	-1000 r_1235	0	1
21	r_3684	1000 r_1237	0.028629	1
22	r_3685	-0.00011 r_1242	0	1
23	r_3686	0 r_1243	0	0
24	r_3687	0 r_1244	0.11521	1
25	r_3688	0 r_1245	4.342508	1
26	r_3689	0 r_1263	0	0
27	r_3690	0 r_1264	0	0
28	r_3691	0 r_1265	0.009731	1
29	r_3692	0 r_1266	0.006801	1
30	r_3693	0 r_1275	0	0
31	r_3694	0 r_1277	-3.72208	1
32	r_3695	0 r_1278	0	0
33	r_3696	0 r_1279	-999.986	1
34	r_3697	0 r_1280	999.9604	1
35	r_3698	0 r_1281	-1000	1
36	r_3699	0 r_1282	8.80E-08	1
37	r_3700	0 r_1288	0	0
38	r_3701	0 r_1290	8.80E-08	1
39	r_3702	0 r_1292	0	0
40	r_3703	0 r_1294	8.80E-08	1
41	r_3704	0 r_1297	0	0
42	r_3705	0 r_1300	-1000	1
43	r_3706	0 r_1356	0	0
44	r_3707	0 r_2034	0.267408	1
45	r_3708	0 r_2227	0	0
46	r_3709	0 r_3348	3.79E-05	1
47	r_3710	0 r_3426	0	0
48	r_3711	0 r_3428	3.79E-05	1
49				
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2	r_3712	0 r_1357	0	0
3	r_3713	0 r_1359	3.67E-05	1
4	r_3714	0 r_1396	0	0
5	r_3715	0 r_1398	-1000	1
6	r_3716	0 r_1477	0	0
7	r_3717	0 r_1479	3.79E-05	1
8	r_3718	0 r_1537	0	0
9	r_3719	0 r_3963	0.000207	1
10	r_3720	0 r_3970	0	0
11	r_3721	0 r_3972	7.14E-05	1
12	r_3722	0 r_3975	2.95E-05	1
13	r_3723	0 r_3977	0	0
14	r_3724	0 r_3979	5.24E-05	1
15	r_3725	0 r_3985	0	0
16	r_3726	0 r_3988	0.00038	1
17	r_3727	0 r_3994	0	0
18	r_3728	0 r_3997	9.45E-05	1
19	r_3729	0 r_4003	0	0
20	r_3730	0 r_4006	0.000109	1
21	r_3731	0 r_4037	0	0
22	r_3732	0 r_1543	0.09984	1
23	r_3733	0 r_1565	0	0
24	r_3734	0 r_1567	-0.03838	1
25	r_3735	0 r_1572	0	0
26	r_3736	0 r_1574	-0.02608	1
27	r_3737	0 r_1582	0	0
28	r_3738	0 r_1585	0.000581	1
29	r_3739	0 r_1586	0	0
30	r_3740	0 r_1588	1000	1
31	r_3741	0 r_1590	0	0
32	r_3742	0 r_1591	0	0
33	r_3743	0 r_1595	0.026077	1
34	r_3744	0 r_1596	-0.01695	1
35	r_3745	0 r_1618	0	0
36	r_3746	0 r_1622	-7.04E-07	1
37	r_3747	0 r_1629	0	0
38	r_3748	0 r_1632	-1000	1
39	r_3749	0 r_1649	0	0
40	r_3750	0 r_1650	0	0
41	r_3751	0 r_1652	1000	1
42	r_3752	0 r_1654	-0.59774	1
43	r_3753	0 r_1661	0	0
44	r_3754	0 r_1663	0	0
45	r_3755	0 r_1665	1000	1
46	r_3756	0 r_1667	-999.789	1
47	r_3757	0 r_1668	0	0
48	r_3758	0 r_1669	-1000	1
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2	r_3759	0 r_1672	1.963804	1
3	r_3760	0 r_1673	0	0
4	r_3761	0 r_1676	-3.79E-05	1
5	r_3762	0 r_1679	0	0
6	r_3763	0 r_1682	0.000575	1
7	r_3764	0 r_1688	0	0
8	r_3765	0.000475 r_1689	0	1
9	r_3766	0 r_1691	-3.79E-05	1
10	r_3767	0 r_1694	-1000	1
11	r_3768	0 r_1695	0	0
12	r_3769	0 r_1696	-0.93273	1
13	r_3770	0 r_1697	1.963804	1
14	r_3771	0 r_1698	-3.79E-05	1
15	r_3772	0 r_1701	3.67E-05	1
16	r_3773	0.000475 r_1704	-0.00049	1
17	r_3774	0 r_1705	0	0
18	r_3775	0 r_1708	0.038377	1
19	r_3776	0 r_1711	0	0
20	r_3777	0 r_1714	-1	1
21	r_3778	0 r_1726	0	0
22	r_3779	0 r_1729	-0.00032	1
23	r_3780	0 r_1745	0	0
24	r_3781	0 r_1748	-0.07108	1
25	r_3782	1000 r_1751	0	1
26	r_3783	0 r_1753	0	0
27	r_3784	-1000 r_1754	0.000564	1
28	r_3785	0 r_1757	0	0
29	r_3786	-1000 r_1758	1000	1
30	r_3787	0 r_1763	-1000	1
31	r_3788	1000 r_1766	8.80E-08	1
32	r_3789	-0.00011 r_1797	0	1
33	r_3790	0 r_1800	0	0
34	r_3791	0 r_1801	3.79E-05	1
35	r_3792	0 r_1803	3.79E-05	1
36	r_3793	0 r_1808	0	0
37	r_3794	0 r_1811	1.136965	1
38	r_3795	0 r_1821	0	0
39	r_3796	0 r_1822	0	0
40	r_3797	3.33E-05 r_1824	-0.34861	1
41	r_3798	0 r_1825	-0.06984	1
42	r_3799	0 r_1827	0	0
43	r_3800	0 r_1829	-1000	1
44	r_3801	0 r_1831	1000	1
45	r_3802	0 r_1832	0.233403	1
46	r_3803	0 r_1836	0	0
47	r_3804	0 r_1840	-0.00362	1
48	r_3805	7.58E-05 r_1858	0	1
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2	r_3806	0 r_1861	-8.80E-08	1
3	r_3807	0 r_1884	0	0
4	r_3808	0 r_1887	0.01449	1
5	r_3809	0 r_1898	0	0
6	r_3810	0 r_1901	-1000	1
7	r_3811	0 r_1904	0	0
8	r_3812	0 r_1907	3.79E-05	1
9	r_3813	0 r_1929	0	0
10	r_3813	0 r_1929	0	0
11	r_3814	0 r_1932	-0.07108	1
12	r_3815	0 r_1946	0	0
13	r_3816	0 r_1947	0	0
14	r_3817	0 r_1952	0	0
15	r_3817	0 r_1952	0	0
16	r_3818	0 r_1963	-0.0012	1
17	r_3819	0 r_1964	0.001205	1
18	r_3820	0 r_1965	-0.58486	1
19	r_3820	0 r_1965	-0.58486	1
20	r_3821	0 r_1974	0	0
21	r_3822	0 r_1975	0	0
22	r_3823	0 r_1976	0	0
23	r_3824	0 r_1977	0.000603	1
24	r_3824	0 r_1977	0.000603	1
25	r_3825	0 r_1978	1.909946	1
26	r_3826	0 r_1979	1.962779	1
27	r_3827	0 r_1989	0	0
28	r_3828	0 r_1992	-1.96278	1
29	r_3829	0 r_1995	3.79E-05	1
30	r_3829	0 r_1995	3.79E-05	1
31	r_3830	0 r_2002	0	0
32	r_3831	0 r_2005	-0.11521	1
33	r_3832	0 r_2022	8.80E-08	1
34	r_3833	0 r_2026	0	0
35	r_3834	0 r_2028	0	0
36	r_3834	0 r_2028	0	0
37	r_3835	0 r_2030	8.71E-05	1
38	r_3836	0 r_2032	0.830825	1
39	r_3837	0 r_2042	0	0
40	r_3838	0 r_2045	-0.56848	1
41	r_3838	0 r_2045	-0.56848	1
42	r_3839	0 r_2050	0	0
43	r_3840	0 r_2051	0	0
44	r_3841	0 r_2053	0.000603	1
45	r_3842	0 r_2054	0.000603	1
46	r_3843	0 r_2056	0	0
47	r_3843	0 r_2056	0	0
48	r_3844	0 r_2060	-0.0068	1
49	r_3845	0 r_2069	0	0
50	r_3846	0 r_2072	0.016373	1
51	r_3847	0 r_2090	0	0
52	r_3848	0 r_2091	0	0
53	r_3848	0 r_2091	0	0
54	r_3849	0 r_2093	999.9767	1
55	r_3850	0 r_2094	-0.0006	1
56	r_3851	0 r_2096	-8.37517	1
57	r_3852	0 r_2097	1000	1
58	r_3852	0 r_2097	1000	1

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2	r_3853	0 r_2100	3.722078	1
3	r_3854	0 r_2105	0	0
4	r_3855	0 r_2107	0	0
5	r_3856	0 r_2108	0.08798	1
6	r_3857	0 r_2111	0.08798	1
7	r_3858	0 r_2125	999.998	1
8	r_3859	0 r_3347	0	0
9	r_3860	0 r_3508	0	0
10	r_3861	0 r_3509	0	0
11	r_3862	0 r_3510	999.9999	1
12	r_3863	0 r_3511	-1000	1
13	r_3864	0 r_3512	-1000	1
14	r_3865	0 r_3513	0.001939	1
15	r_3866	0 r_3514	0.000114	1
16	r_3867	0 r_3515	-1000	1
17	r_3868	0 r_3517	-999.998	1
18	r_3869	0 r_3518	1000	1
19	r_3870	0 r_3519	1000	1
20	r_3871	0 r_3520	-0.00194	1
21	r_3872	0 r_3521	0	0
22	r_3873	0 r_3522	0	0
23	r_3874	0 r_3523	-1000	1
24	r_3875	0 r_3524	1000	1
25	r_3876	0 r_3525	0.000116	1
26	r_3877	0 r_3526	-0.00194	1
27	r_3878	0 r_3527	-0.00011	1
28	r_3879	0 r_3528	-1000	1
29	r_3880	0 r_3529	0.000227	1
30	r_3881	0 r_3530	-0.00023	1
31	r_3882	0 r_3531	0.000915	1
32	r_3883	0 r_3532	0.000915	1
33	r_3884	0 r_3533	-0.00091	1
34	r_3885	0 r_3534	0.000843	1
35	r_3886	0 r_3535	0	0
36	r_3887	0 r_3536	999.9973	1
37	r_3888	0 r_3537	0	0
38	r_3889	0 r_3538	0.00081	1
39	r_3890	0 r_3540	-0.00081	1
40	r_3891	0 r_3541	0	0
41	r_3892	0 r_3542	0	0
42	r_3893	0 r_3543	-999.998	1
43	r_3894	0 r_3544	999.9981	1
44	r_3895	0 r_3545	0.000527	1
45	r_3896	0 r_3546	0.000283	1
46	r_3897	0 r_3547	0.00114	1
47	r_3898	0 r_3548	-0.00114	1
48	r_3899	0 r_3549	0	0
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2	r_3900	0 r_3551	0	0
3	r_3901	0 r_3552	999.9995	1
4	r_3902	0 r_3554	-0.00011	1
5	r_3903	0 r_3559	0	0
6	r_3904	0 r_3562	-0.00021	1
7	r_3905	0 r_3568	0	0
8	r_3906	0 r_3569	0	0
9	r_3907	0 r_3570	0	0
10	r_3908	0 r_3571	-1000	1
11	r_3909	0 r_3573	999.9999	1
12	r_3910	0 r_3574	-0.00194	1
13	r_3911	0 r_3575	1000	1
14	r_3912	0 r_3576	-1000	1
15	r_3913	0 r_3577	1000	1
16	r_3914	0 r_3578	-1000	1
17	r_3915	0 r_3579	-1000	1
18	r_3916	0 r_3580	0.001939	1
19	r_3917	0 r_3582	0	0
20	r_3918	0 r_3583	0	0
21	r_3919	0 r_3584	0	0
22	r_3920	0 r_3585	999.9981	1
23	r_3921	0 r_3586	-999.998	1
24	r_3922	0 r_3587	-999.998	1
25	r_3923	0 r_3588	0.000109	1
26	r_3924	0 r_3596	0	0
27	r_3925	0 r_3597	0	0
28	r_3926	0 r_3599	-1000	1
29	r_3927	0 r_3600	1000	1
30	r_3928	0 r_3659	0	0
31	r_3929	0 r_3660	0	0
32	r_3930	0 r_3662	3.33E-05	1
33	r_3931	0 r_3663	-3.33E-05	1
34	r_3932	0 r_3666	0	0
35	r_3933	0 r_3669	-0.00047	1
36	r_3934	0 r_3678	0	0
37	r_3935	0 r_3679	0	0
38	r_3936	0 r_3680	0	0
39	r_3937	3.79E-05 r_3681	-1000	1
40	r_3938	0 r_3682	1000	1
41	r_3939	-999.999 r_3683	-1000	1
42	r_3940	0 r_3684	1000	1
43	r_3941	0 r_3685	-0.00011	1
44	r_3942	0 r_3762	0	0
45	r_3943	0 r_3765	0.000475	1
46	r_3944	0 r_3770	0	0
47	r_3945	0 r_3773	0.000475	1
48	r_3946	0 r_3779	0	0
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2	r_3947	0 r_3781	0	0
3	r_3948	0 r_3782	1000	1
4	r_3949	0 r_3783	0	0
5	r_3950	0 r_3784	-1000	1
6	r_3951	0 r_3785	0	0
7	r_3952	0 r_3786	-1000	1
8	r_3953	0 r_3788	1000	1
9	r_3954	0 r_3789	-0.00011	1
10	r_3955	0 r_3794	0	0
11	r_3956	0 r_3797	3.33E-05	1
12	r_3957	0.000475 r_3802	0	1
13	r_3958	0 r_3805	7.58E-05	1
14	r_3959	0 r_3934	0	0
15	r_3960	0 r_3936	0	0
16	r_3961	0 r_3937	3.79E-05	1
17	r_3962	0 r_3939	-999.999	1
18	r_3973	7.14E-05 r_3954	0	1
19	r_3987	3.43E-05 r_3957	0.000475	1
20	r_3996	0.000253 r_3960	0	1
21	r_4005	6.13E-05 r_3961	0	1
22	r_4038	6.87E-05 r_3962	0	1
23	r_4040	8.80E-08 r_3973	7.14E-05	1
24	r_4043	0 r_3987	3.43E-05	1
25	r_4044	0 r_3996	0.000253	1
26	r_4041	0.08798 r_4005	6.13E-05	1
27		r_4038	6.87E-05	1
28		r_4040	8.80E-08	1
29		r_4041	0.08798	1
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